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COURSE OF LECTURES
ON
DISEASES OF THE SKIN;
THEIR
HISTORY, PATHOLOGY, AND TREATMENT.

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Lecture XI.

TREATMENT OF SCARLET FEVER.

When scarlatina assumes the characters of extreme mildness, such as I have depicted under the name of scarlatina simplex, the treatment cannot be of too simple a kind. It is to this form that Sydenham alludes when he remarks that none die save from the too great officiousness of the doctor, "nimia medici diligentiâ." But the ministry of the doctor is no longer limited to physic, as it was in the time of Sydenham; the laws of hygiene and diet form an especial part of his study; hence his officious care cannot be too active. Indeed, if for no other purpose, his vigilance is needed to protect his patient from domestic poisons in the form of medicines, and, so-called, "niceties." In the mildest form of scarlatina the child should be confined to his apartment; the room should be well ventilated; the bed-coverings light; and the diet restricted to milk and farinaceous food. As the indication presents, some mild laxative may be administered, and at the decline of the disease, if there be much debility, wine, or a simple tonic.

In scarlatina anginosa, as in scarlatina simplex, the best treatment is expectant. The nausea and sickness which form a part of the symptoms of invasion, are to be controlled by effervescent salines and small doses of neutral salts; a valuable medicine during the whole progress of the febrile stage being the liquor ammoniæ acetatis. As soon, however, as the febrile symptoms subside, tonics combined with mineral acids, may be administered, and their action aided by a more generous diet. For the inflammation of the throat, if moderate, acid and astringent gargles are useful, and in young children the subborate of soda combined with honey and vinegar. When the tonsils are of so large a size as to interfere with deglutition or respiration, they may be greatly relieved by the application of leeches in the submaxillary region, the bleeding being promoted by a poultice after the leeches are removed. The number of leeches must be determined by the age of the child; in moderately strong children the requisite number being from eight to twelve. Dr. Robert Williams recommends the latter measure very strongly, and remarks, that they relieve the head and tranquillise the delirium; for it is a law of disease depending on morbid poisons, that by relieving the part specifically acted upon we relieve the brain. A very marked instance of this twofold relief was lately observed in a young woman, of twenty years of age, who laboured under scarlatina mitior, accompanied with severe headach and very active delirium. These symptoms were attempted to be relieved by the repeated application of leeches to the temples, but without success. A similar application of leeches was now made to the throat, when not only was the affection of the tonsils relieved but the delirium immediately subsided.

Scarification of the tonsils is reprobated by several authors, and especially by Fothergill, as calculated to induce fatal mortification. I imagine that by this term is meant the puncture of these organs in several situations with the point of a lancet, and possibly such treatment may be followed by inconvenient results; but I cannot conceive any bad effects to follow a free incision of the tonsil, for this seems the very plan to avoid mortification, insomuch as it tends to relieve the over-congested vessels of their oppressive load. However you may decide, I would have you watch attentively and without prejudice the effects of your treatment, and until experience shall incline differently, respect on every occasion the opinions of the learned men who have preceded you. The

nitrate of silver applied in substance is always beneficial in this enlarged state of the tonsils, as it serves not merely to constringe the vessels of the mucous membrane, but also to cause the separation of the viscid mucus of the fauces. Blisters to the exterior of the throat are to be avoided, in consequence of the additional irritation which they are apt to occasion, and the serious effects which this irritation produces on the nervous system.

Bleeding, as may be anticipated, was very early employed as a means of combating the extreme febrile action of scarlet fever, but the effects of the remedy were such as to deter modern practitioners from pursuing the same plan. Indeed, now that the nature of scarlatina is better known, it would be irrational to expect that the inflammatory symptoms could be subdued by abstraction of blood. The disease is essentially the working of a poisonous ferment, and could we remove the ferment, or stop its action, both of which, in the present state of medicine, being impossible, we might hope to arrest the disease; bleeding, therefore, can but have the effect of reducing the powers of the system, and rendering them defenceless against the encroachment of the poison. Local bleeding, in specific congestions, may be adopted with advantage, but general bleeding is, for the reasons above stated, open to the strongest objections.

Emetics have been recommended in scarlatina anginosa, on account of their stimulant action on the mucous membrane, the more fluid secretion which is poured out during the continuance of nausea, and the powerful expellent action which they induce; the effects of their operation being the clearing of the pharynx and fauces of the large quantity of inspissated viscous mucus which collects upon the surface. Supposing them to effect the intended object, they must be confessed to be a clumsy measure; but as vomiting is calculated to produce disturbance of the circulation, and to determine congestion of the brain, their action is to be regarded as injurious. Hence, if there be a disposition to retch, we endeavour to counteract the tendency by effervescing saline medicines. Withering gave his sanction to the use of emetics, but they have at the present day fallen into disuse.

Purgatives, like emetics, have been much lauded, and have in their time formed the basis of treatment of several eminent practitioners. Even Willan administered calomel in purgative doses. In this, as in other points of practice, medicine has returned to a more rational principle. A gentleman, whose practice I have long watched for its success, Mr. Grantham, of Crayford, writing to me on this subject remarks, "I do not exhibit mercury, but at the onset give a small dose of castor oil, and during the eruptive stage I administer the following draught every six hours:—

℞ *Sulphatis magnesiæ*,
Spiritûs ætheris nitrici, aa., ℥j;
Liquoris ammoniæ acetatis, ℥ss;
Aquæ menthæ piperitæ, ℥j.
M. ft. haustus.

If needful," he continues, "I assist the evolution of the eruption by a warm bath, containing six ounces of liquor ammoniæ fortius, in which the patient is immersed as high as the epigastrium." Dr. Hamilton, as may be expected, was an advocate of the purgative plan; but, as an eminent modern author remarks, "it should be remembered that twelve cases out of ninety-five fell under this treatment, while of those treated by moderate stimulants at the London Foundling Hospital, only three per cent. died, which, supposing the disease to have been of equal intensity in both instances, is a great increase of mortality."

Cold affusion in scarlatina is a remedy of the utmost importance and value, when used judiciously. It is correct in principle, and excellently adapted to meet the peculiar desiderata of the disease. But cold affusion, like other valuable remedies, may be abused, and then its therapeutic power may become mephitic. I must, therefore, strongly protest against your using cold affusion until you can fully appreciate the conditions proper for its employment. Dr. Currie, to whom we are indebted for its suggestion, recommended that it should be used only when the skin is hot and dry. The manner of employing affusion is to pour one or two pailfuls of cold water over the patient, to rub him quickly dry, and place him in bed, when in a short space of time he falls asleep and breaks out into a moderate perspiration. If the feeling of cold should continue after the bath a little warm wine and water is administered. The effect of cold affusion is to diminish the frequency of the pulse, to reduce the thirst and heat of skin, and to tranquillise the nervous system. If the heat and dryness of the skin return, cold affusion may be repeated for a second and a third time. Bateman speaks of this remedy in the following terms:—"Cold affusion combines in itself all the medicinal properties which are indicated in this state of disease, and which we should scarcely, *à priori*, expect it to possess; for it is not only the most effectual febrifuge, but it is, in fact, the only sudorific and anodyne which will not disappoint the expectation of the practitioner under these circumstances. I have had the satisfaction in numerous instances of witnessing the immediate improvement of the symptoms, and the rapid change in the countenance of the patient produced by washing the skin. Invariably, in the course of a few minutes, the pulse has been diminished in frequency, the thirst has abated, the tongue has become moist, a general free perspiration has broken

forth, the skin has become soft and cool, and the eyes have brightened, and these indications of relief have been speedily followed by a calm and refreshing sleep." As a substitute for affusion the skin may be moistened repeatedly by means of a sponge dipped in cold water; or, if it be preferred, in tepid water, with the addition of vinegar.

Belladonna is much used on the continent as a preventive against the infection of scarlatina, and as an agent in the cure of the fever. It was first suggested by Hahnemann, and was exhibited by him in minute doses, upon the usual grounds of the homœopathist, namely, its reputation of causing a cutaneous eruption similar to that of scarlet fever. Setting aside the groundless hypothesis of Hahnemann, there is no question in my mind that this medicine in small doses may have the power of checking and reducing the nervous excitement which constitutes so principal a feature in the eruptive fevers, by virtue of its sedative effects. Upon the same principle it is that cold affusion acts beneficially. The local application of opium to irritable sores is another instance of the subjection of inflammatory excitement by means of sedatives; and opium, in large and repeated doses, has latterly been employed in France for the same purpose.

Scarlatina maligna calls for the employment of a tonic method of treatment from the first appearance of the symptoms denoting the malignant change. In this form, bleeding, either locally or generally, is quite out of the question; and the vitality of the surface is so much reduced that blisters would be apt to occasion extensive sloughing. Tonic medicines internally, soothing and moderately stimulating applications to the throat, and gentle laxatives, as may seem to be required, constitute the principal indications to be fulfilled. The best tonic remedies are, quinine with infusion of roses, bark, cascarilla, hops, canella, alone or in combination with the mineral acids. Cold affusion is not applicable in this form of scarlet fever; but much advantage may be gained by the use, in its stead, of sponging with warm vinegar, or vinegar and water. A medicine which deserves the highest amount of consideration in the treatment of scarlatina maligna is wine. The quantity of wine that may be exhibited to a child daily is from one to three ounces, in a state of dilution, and to an adult double that quantity. It may be given either diluted with water simply, in arrow-root, or in any simple drink which the patient may be taking. Dr. Robert Williams, who is a strong advocate for wine, remarks, "that the existence of delirium does not contra-indicate the treatment by wine, for most commonly that symptom is merely a derangement of function, and may be disregarded. The wine should be continued till the patient is decidedly convalescent, and even, perhaps, for some time afterwards. But while pursuing this treatment it is necessary that the patient's bowels should be strictly attended to, and be gently and daily relieved." The same author observes, that when any doubt exists as to the exhibition of wine, from the state of the throat, it is better to err on the safe side, and if swelling of the tonsils should result, to discontinue its use.

In scarlatina sine exanthemate the treatment should be adapted to the particular form which the fever may assume. Attempts may be made, if it meet with the views of the practitioner, to throw out the eruption by the use of stimulants, the mustard-bath, &c., but I much question whether any benefit would result even were the efflorescence produced by these means. The case is different where the eruption has once appeared and has receded; in this case you should have recourse to mustard-baths, stimulating liniments, and mustard plasters, or even blisters. If the eruption exhibit a disposition to metastasis it may be frequently fixed by means of a blister.

The complications of scarlatina call for a treatment directed especially to the nature of the complication. When, from the presence of delirium or coma, cerebral congestion is suspected, leeches may be applied to the temples, behind the ears, or to the mucous membrane of the nose. Counter-irritants may be used, in similar cases, for the purpose of determining to the surface; the best form of counter-irritant is the mustard plaster, as this can be removed as soon as sufficient action is produced. But blisters are objectionable from their tendency to cause sloughing of the integuments. When the cerebral congestion is associated with inflammation of the fauces, the most ready mode of relief is the application of the leeches in the submaxillary region. If the lungs, the pleuræ, or the stomach, be the seat of congestion, the leeches and derivative measures should be transferred to those regions. Diarrhœa may be relieved by leeches and fomentations, succeeded by sinapisms to the abdomen. Secondary disorder of the kidneys is to be treated by similar means, aided by foot-baths, rendered stimulating by mustard. Ulceration of the tonsils may be brought into a healing state by nitrate of silver, either in solution, and applied by means of a piece of sponge, or in substance.

The anasarca of scarlatina, depending, as it does, on inflammatory congestion of the kidneys, is best relieved by bleeding, the quantity of blood withdrawn being determined by the strength of the patient. Abstraction of blood should be succeeded by purges of calomel; acetate of potash; the warm bath, with or without mustard; dry frictions or stimulating liniments to the skin; and warmth to excite perspiration. Digitalis is approved by some practitioners, but

by no means generally; it is a remedy that calls for the greatest caution. The supertartrate of potash, in drachm doses, is recommended by Dr. Robert Williams as the best purgative, and the same physician prescribes salicine, in doses of five grains, as soon as the inflammatory symptoms have subsided. Salicine is preferable to other tonics from its diuretic effects. Steel is also useful in these cases, the best preparation for the present purpose being the tartrate of iron.

The inflammation of the joints requires to be treated by sedative fomentations and rest, locally, and by the internal administration of gentle laxatives. If the pain be severe, morphia or hyoscyamus, in small doses, may be exhibited.

VARIOLA, OR SMALL-POX.

Small-pox is an acute inflammation of the tegumentary investment of the entire body, both cutaneous and mucous, associated with fever of an infectious and contagious kind. On the skin it is characterised by an eruption of red points, which become in succession minute pimples, or vari; acuminated vesicles with hardened bases; flattened and umbilicated vesicles; pustules, and hard brown scabs. The scabs fall off at a varying period between the eleventh and twenty-fifth day, and are succeeded by small, irregular pits and permanent cicatrices. The inflammation of the mucous membrane is indicated by congestion of the surface; and in those situations where the epithelium is of moderate thickness, by the formation of pustules, which are irregular in size and form, and very speedily burst. The most frequent seat of pustules is the mucous lining of the air-tubes; they have also been observed in the alimentary canal and in the urinary bladder. The fever of small-pox is of the remittent kind; it precedes the eruption two, three, or four days, subsides when the eruption is developed, and returns as soon as the eruption reaches its height; the latter occurrence taking place on the eighth day in discreet, and on the eleventh in confluent small-pox.

Small-pox presents a variety of modifications dependent upon its mode of origin, its distribution on the surface of the skin, and its degree of severity. Thus it may be natural or artificial in its origin; in the one case making its appearance without premonition, and constituting the variety termed *natural small-pox;* in the other resulting from the voluntary introduction of the virus into the system, with the view of inducing a mitigated form of disease—*inoculated small-pox.* As relates to distribution and degree of severity, the eruption may be *discreet,* that is to say, the pustules may be distinct and separate from each other; it may be *coherent,* that is, the pustules may be numerous, and in some situations so closely assembled as to have no interval of sound skin between their bases; or it may be *confluent,* in which case the pustules are so abundant and so thickly clustered that they run the one into the other, and form one uniform suppurating surface of considerable extent. Besides the preceding, small-pox may be chastened in its characters by the previous occurrence of either the natural or inoculated disease, or by vaccination, constituting *modified small-pox.* Indeed, the eruption is so much altered from its original type when it occurs in a modified form, as to be known by a separate designation, varioloid or varicella. When variola occurs for the first time we call it *primary small-pox;* and a second or subsequent attack we term *secondary small-pox.* During the progress of an epidemic of small-pox, again, we sometimes meet with cases in which the fever is present without the eruption, and this constitutes the variety known by the name of *variola sine variolis.* The remembrance of these terms will be found convenient in practice, as a means of conveying your meaning in speaking and writing without ambiguity.

In tracing the course of variola we shall find it to present for our consideration a succession of periods. These periods are five in number, namely, incubation, invasion, eruption, suppuration, and desiccation. This division of the disease gives us the opportunity of comparing the symptoms of the respective periods among themselves, and with the same periods in other instances.

The first period, or that of *incubation,* is variable in length; it comprehends all that space of time which intervenes between exposure of the body to infection or contagion, and the first indication of febrile symptoms. In very severe cases the symptoms of fever have been apparent as early as the fifth day; but in instances of milder disease the period of invasion has been protracted to the twentieth day or even later. From five to twenty days, therefore, may be taken as the average length of the period of incubation. During this time the poison is latent; its presence is not made known by symptoms, but it is already commencing those actions in the economy which are to be evinced by the subsequent fever.

The second period, namely, that of *invasion,* as it forms a part of the disease, is short and defined, lasting from two to four days. It commences with the ordinary train of febrile symptoms of the severer kind; there is great lassitude, with pains in the loins, in the limbs, and in the head; drowsiness, restlessness, and prostration, with rigors and creeping of the skin. Chomel regards the pain in the loins as pathognomonic, considering that it indicates disorder of the kidneys; I should be inclined to doubt this opinion, but the fact of pain in the loins being an early symptom of the fever is deserving of attention. The skin is hot, but its secretion is not necessarily affected, it may be either moist or dry; the

pulse is quick, small, and sometimes irregular; respiration is quickened; there is thirst; loss of appetite; a white tongue; nausea, frequently vomiting; pain and weight at the epigastrium; constipation, and high-coloured and scanty urine. The degrees of nervous depression are proportioned to the quantity and influence of the morbid poison. The succession of symptoms, which I have just stated, may be regarded as those of the average power of the disease; but in some instances the drowsiness proceeds to lethargy and sometimes coma; and in children, particularly during teething, to convulsions. Indeed, the prostration may be so extreme during this period as to be speedily fatal. Where the stomach is the principal seat of congestion the vomiting is unceasing, and the tongue is red, first at the tip, and then over its general surface. Sometimes the lungs are most severely affected, in which case there are pains in the chest, oppression of breathing, and troublesome cough; and at other times it is in the heart that the violence of the febrile attack seems centered, and the patient suffers from anxiety, and tumultuous action of that viscus. All the symptoms of invasion are augmented during the night.

When the case is likely to become one of confluent small-pox, the above symptoms are elevated to their highest pitch of severity. The vomiting is more troublesome; the dyspnœa greater, and the nervous depression intense. The tongue and lips are dry, and covered with sordes; the heat of skin is excessive; and there is sometimes diarrhœa.

The approach of the period of eruption is commonly announced by an augmentation of the symptoms of invasion, to be immediately followed by the constitutional calm which attends the eruptive stage. The oppression and languor cease; the nausea and vomiting are suspended; the pulse becomes natural, and all distress and pain are lulled.

The manner of appearance of the eruption, together with the diversity of characters which it presents under different circumstances, would, in the present lecture, carry me beyond the limits assigned to me; I shall, therefore, in my next commence with the period of eruption.

THE SEAT OF STRICTURE.—M. Civiale, in a recent memoir, asserts that the cause of stricture is not in the mucous membrane of the urethra, which, he says, is little, if at all, involved in its production; but in the thickening of the cellular coat external to that membrane. This fact, once established, would, as he states, show the malpractice of treating stricture by caustic applications, which could only enlarge the passage by the destruction of a healthy structure, and, of course, at the risk of setting up anew and dangerous inflammation.

LIEBIG,

HIS CHEMISTRY AND REVIEWERS.

BY

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No. VII.

Gelatine is the azotised substance in the nutriment of the carnivora, and of other animals who live on a mixed diet, next in importance to albumen, fibrine, and caseine; it enters largely into the composition of jellies, soups, and fish, forming the principal constituent of some articles employed as food, and occurring in smaller quantities in many. Even muscular flesh contains a portion of gelatine belonging to the cellular membrane interspersed amongst its fibres; it is obtained from the tendons, bones, and internal and external tegumentary membranes of animals, and has been employed as a main article of sustenance for the poor in public institutions, for the support of invalids, and for the recovery of health and strength during convalescence from acute disease. Jelly has even been relied upon for the nourishment of the whole of the animal vitalised tissues, upon principles certainly erroneous. Its properties, therefore, require to be well understood.

Gelatine was for some time regarded as a product of the action of boiling water upon the tissues from which it is procured, an opinion entertained by Berzelius. More recently, however, the fact has been ascertained, that its peculiar chemical characteristics are manifested by those tissues, both before as well as after the process by which it is obtained in a separate state.

It has lately been shown that the tissues formerly classed together as gelatinous, contain two somewhat allied substances, gelatine and chondrine.

The most striking circumstance connected with these substances is, that they differ entirely from the compounds of proteine; they contain no sulphur, no phosphorus, and either more nitrogen or less carbon, or different proportions of oxygen and hydrogen, by which a chemical distinction is clearly established; they do not even belong to the same series, and accordingly we must regard gelatine and chondrine, whether in reference to diet or to the constitution of the animal structures, as totally distinct, in a chemical point of view, from albumen and fibrin, the essential principles of the blood.

Gelatine.

The formula adopted by Liebig, from Scherer, is—

$$C_{40}\,H_{41}\,N_{7\frac{1}{2}}\,O_{16}.$$

There are circumstances under which this substance must be formed from the compounds of proteine in the animal economy; thus, oats, beans, wheat, &c., contain no gelatine (Table I.), although they frequently constitute the entire food of certain herbivora.

Liebig points out several ways in which, by comparing the formula given above, with that of albumen or proteine, the formation of gelatine may be conceived. I. Supposing the carbon to be a fixed quantity, albumen might become gelatine, by the separation of sulphur and phosphorus, with the addition of oxygen, of water, and of the elements of ammonia. II. Assuming the nitrogen to remain entire, albumen might become gelatine by the separation of the sulphur and phosphorus, and of carbon and hydrogen. This is regarded by Liebig as more probable than the former. III. Gelatine might be produced by two atoms of proteine combining with the elements of a third atom of proteine from the metamorphosed tissues. IV. Three atoms of proteine might become gelatine, by the loss of the elements of a compound containing no nitrogen, which actually occurs as one of the products of the transformation of the choleic acid of bile.

According to our author's views, there is very little probability indeed that the gelatinous tissues, membranes, tendons, and the like, can form themselves out of heterogeneous materials brought to them from the blood. If muscular fibre and other vitalised tissues require a substance identical in composition with themselves for their nutrition, the non-vitalised gelatine of bones and membranes also requires a compound to be presented to it ready prepared for assimilation. Under many circumstances such a material must be formed in the organism, but the site of its formation is at present unknown. Liebig suggests the probability that gelatine takes its origin during the transformation of venous into arterial blood.

Although, therefore, the compounds of proteine must be formed into gelatine in the living system for the nourishment of the gelatinous tissues, the converse does not hold good. Gelatine, the most highly azotised principle of food, is totally incapable of forming proteine. We may be assured of this when we consider that notwithstanding, undoubtedly, one compound of proteine may be converted into another, as, for instance, fibrine into albumen, and albumen into fibrine and casein, yet we have no proof whatever, in any one case, of the vital force having, in animals, converted any azotised substance into proteine. Hence, gelatine is incapable of nourishing the albuminous and fibrinous structures, and we have in this a most satisfactory explanation why it is, that even carnivorous animals soon die of starvation if limited to a gelatinous diet. Thus much of the gelatine of food and the nourishment of the gelatinous tissues. In the next place, as respects the

Metamorphoses of the Gelatinous Tissues,

Liebig believes that the change of matter proceeds much slower than in the more vitalised parts, a position borne out by the fact, that in a starving individual the fat and muscular tissue having in great part disappeared, no perceptible alteration is found in the tendons and membranes. The gelatinous tissues, again, cannot give origin to exactly the same products as the albuminous structures. The probable modes of the formation of gelatine above cited, will lead to analogous conceptions of the nature of the products of its tissues, and these will be borne out by various interesting facts, as, for instance, the formation of uric acid and urates in the cellular tissue of the skin and joints, which frequently occurs. It has to be remembered, also, that the formula of flesh and blood (Table II.) must represent, together with fibrin and albumen, a proportionate, although minute quantity of gelatine; so that, in the absence of any facts which indicate the contrary, we may refer the products of these tissues, together with those of the compounds of proteine, to the bile and urine, as the channels of their elimination.

Chondrine.

This substance composes the cellular cartilages, as those of the ribs; it differs from gelatine in containing less nitrogen and more oxygen, its formula being

$$C_{40}\,H_{40}\,N_{6}\,O_{20}.$$

It may be regarded as a compound of proteine, with two atoms of oxygen and four of water, and is much more likely to undergo transformations similar to those of the protenised tissues than gelatine is, since by the abstraction of a part of its oxygen it may be resolved into choleic acid and urate of ammonia.

Although gelatine must be frequently formed in the animal body, and although it is totally incapable of nourishing the vitalised tissues, by no means is it to be rejected as a useless article of diet. Liebig remarks, that no substance can be better fitted for the nourishment of membranes and for the production of cells than the gelatine which exists in animal food, and is taken in a soluble form, or becomes soluble in the stomach; thereby intimating that while fibrine and albumen nourish muscular and nervous structures, gelatine, ready prepared, is assimilated to the animal matter of bones and of the skin, cellular membrane, and gelatinous structures generally; which circumstance may account for the fact that D'Arcet found gelatine extremely useful as

a part of the diet in hospitals, and that it materially abridged the period of convalescence.

Nevertheless, animals, when fed on gelatine alone, die in about thirty days; they gradually lose their vital force, their fat becomes exhausted first, and then their muscular and albuminous structures waste: when at the point of starvation they may be easily and with certainty recovered by giving them protenised food. Edwards and Balzac are quoted as having found, that the addition of a very small quantity of meat to soup is sufficient to render the latter nutritive to dogs.* One-seventh part of soup made from horse-flesh, is said to have rendered gelatine sufficiently nutritious, the effect being attributed to the sapid and odorous principles of the meat; but we find that the soup employed in these experiments was made into a soft paste for use with bread. Aware, as we now are, of the real nutritive properties of bread, our eyes are opened in this instance to a fatally erroneous inference, arising from the defects of our former knowledge of the subject. Attendants on the sick entertain very erroneous notions respecting the use of

Jelly as an Article of Food.

If I have succeeded in placing this subject in a clear point of view before my professional brethren, I believe that I shall have furnished a valuable principle by which its use may be regulated. It is especially serviceable in debilitated states of the system, where there is reason to believe that the power of forming gelatine is diminished, and it is then, in all probability, carried to the gelatinous tissues ready prepared. But we must bear in mind that alone it will never serve for the repair of the fibrinous and albuminous tissues, nor for the regeneration of the vital force necessary for carrying on the functions of life, when that force has been reduced to a very low standard; it has probably a secondary use in the economy of the sick, for those animal principles of the digestive fluid, to which the properties of ferments or solvents have been ascribed, being products of membranes, gelatine may promote the secretion of such principles, and thereby aid the process of digestion in its various stages. When the object, therefore, is to recruit the system, that is to say, to promote the growth of structures which have been unduly wasted, and to augment the available vital force, the food prescribed may consist with great advantage of a proportion of jelly, but if in some such cases jelly alone were to be depended upon, even for a moderate period (I believe I may say for a few days), death would be the result. There is a point also in the treatment of convalescence from acute diseases in which it is a great practical mistake to allow, even for a few days, gelatinous diet to constitute the principal azotised food of the patient, the consequence being frequently disturbance of the digestive functions, and uniformly protracted debility.

* The Physiology of Digestion. A. Combe, M.D., p. 247, 3rd edit.

The consideration of the nutrition of carnivorous animals, strictly so called, has led to the above remarks, for although my object in these papers is to investigate the principles contained in Liebig's work, and the foundation upon which they rest, it becomes scarcely possible to avoid altogether the introduction of observations bearing upon practice. We proceed in the next place to examine the process of

Nutrition in the Herbivora,

which appears, at first sight, in animals living upon vegetables alone, to differ totally from the former. The digestive organs of the herbivora are more complex than those of the carnivora, and the great mass of their food contains but little nitrogen. Yet experience proves that they cannot live upon food destitute of nitrogen, and that the quantity of food which they consume is in a great measure in an inverse ratio to the proportion of nitrogenised principles which it contains, their blood being formed essentially from compounds of nitrogen identical with those which supply blood to carnivorous animals. By a careful examination of Table I., A, B, C, it will be found that oats, peas, beans, and other seeds, contain vegetable albumen, gluten, and casein. All other substances nutritive to animals contain these proximate principles, which are not only similar, but identical in composition with the essential principles of the food of carnivora, and of the blood of all animals, containing precisely the same proportions of sulphur, phosphorus, and phosphate of lime. Thus, the great truth is established, that the constituents of the blood of animals is produced originally in the organism of vegetables. From this, also, it appears that the development and growth of the animal organism is universally dependent on certain proximate principles employed as food, already formed by the vital force, and identical with the chief constituents of the blood. "The development of the animal organism begins with those substances in the production of which the life of an ordinary vegetable ends, and the first substance capable of affording nutriment to animals is the last product of the creative energy of vegetables."

The existence of the herbivora depends throughout their lives not alone upon the compounds of proteine presented to them, ready formed, as constituents of their diet, the "plastic elements of nutrition," but also upon non-nitrogenised substances which Liebig has called "elements of respiration."

These constitute four-fifths of their diet; they are excessively rich in carbon and hydrogen, containing, with other matters, a large proportion of gum, starch, or sugar, the most abundant and widely extended of which is starch, and there is this remarkable feature connected with them that they closely resemble sugar of milk, a substance which enters largely into the diet prepared by nature for the young of the carnivora.

These vegetable principles which are consumed in so large an amount by the herbivora, are also very closely allied to each other in their chemical composition, and are convertible into each other by very slight transpositions of atoms. Thus, starch becomes sugar by the simple addition of the elements of water. Liebig illustrates the relations of these substances to each other in the following manner, C representing carbon and aq. water:—

Starch	=	12 C	+	10 aq.		
Cane-sugar	=	12 C	+	10 aq.	+	1 aq.
Gum	=	12 C	+	10 aq.	+	1 aq.
Sugar of milk	=	12 C	+	10 aq.	+	2 aq.
Grape-sugar	=	12 C	+	10 aq.	+	4 aq.

For the same number of equivalents of carbon, starch contains 10 eq. of water, or of its elements, and grape-sugar 14 equivalents.

There are three very remarkable circumstances connected with the nutrition of herbivora.

1. The energy of their vegetative life, and accordingly their capacity for increase of mass is greater than in the carnivora; the latter devour their prey only when urged by hunger, and their flesh always remains tough and sinewy. The sheep and cow eat almost without interruption, and they convert into organised tissue all the nutritive parts of their food beyond the quantity required for supplying waste. The excess of blood formed is converted into muscular and cellular tissue, and they become plump and fleshy; but in herbivora habituated to much muscular motion, as in the hare and stag, this difference is not so marked.

2. Their food containing so small a proportion of the compounds of proteine, the change of matter in their organised structures must be proportionately slower. Liebig states that this is ascertained to be the fact, from a consideration of the composition of their urine. Assuming that this fluid contains the products of the metamorphosed tissues, by its comparison in the two classes of animals, we find it indicated that the process of change of matter differs both in form and rapidity.

Sulphates, phosphates, and urates, derived from the albuminous and fibrinous tissues are abundant in the acid urine of animals living upon flesh. Phosphates and sulphates occur in the smallest possible quantity in the alkaline urine of herbivorous animals. In the urine of the horse, living upon oats and hay, phosphoric acid is rarely to be detected. In Thomson's "Animal Chemistry" I find it stated that the urine of the horse is alkaline, and contains no phosphate whatever. According to Fourcroy's and Vauquelin's analysis, it contains only .07ths of urea. Chevreul could detect no phosphate of lime in the urine of the camel. Liebig takes the deficiency or absence of the alkaline phosphates as an obvious indication of the slowness with which some, if not all, the tissues in this class of animals are metamorphosed. The diminished quantity of urea, uric acid, and other compounds of nitrogen, has the same signification.

3. The herbivora are prone to the production of fat, and this leads us to a consideration of the interesting and important subject of

The Formation of Fat in Animals.

The production of fat in every part of the body in carnivorous animals is "utterly insignificant;" the flesh of wild animals of the herbivorous class being also devoid of fat. The circumstances under which animals not otherwise fat become so, are very marked and decided, and a consideration of them leads to a knowledge of the true origin of fat. Thus, dogs and cats, originally carnivoræ, have their fat increased, under a mixed diet and comparatively little exercise, on becoming domesticated. We can increase the formation of fat also at pleasure in other domestic animals, but only by means of diet not containing nitrogen. A pig fed with highly nitrogenised food becomes full of flesh; when fed with potatos, consisting chiefly of starch, it acquires little flesh, but a thick layer of fat. A stall-fed cow furnishes milk not only rich in sugar, but also in butter. The milk of the cow in the meadow contains less of the fatty material and more casein; beer and farinaceous diet increase the proportion of butter in the milk of the human female, while an animal diet, although it diminishes the quantity of milk, renders it richer in caseine.

These are not only interesting considerations, but highly practical also. We shall now inquire into Liebig's explanation of them; because, if we can arrive at a true theory upon this, as upon other subjects, we may reason from what is known absolutely to what is unknown, and there is no valid reason why we should not learn how to influence the nutrition of certain tissues in diseased states of the system, or in states tending to, or verging upon, disease, as we have already ascertained how to control the nutrition of the tissues in the lower animals for special purposes.

When the composition of the chief materials of non-nitrogenised food, as, for instance, starch and sugar, is compared with that of various kinds of fat (Table II.), it becomes obvious that they agree in contain-

ing the same relative proportions of carbon and hydrogen, and that they differ only in their proportion of oxygen. From this it follows that by the mere separation of a portion of oxygen from sugar, starch, or gum, substances must be formed having exactly, or very nearly, the composition of fat. If, from the formula of starch

$$C_{12}\ H_{10}\ O_{10},$$

we take nine equivalents of oxygen, there remains very nearly the empirical formula of fat,

$$C_{11}\ H_{10}\ O.$$

The difference being only one equivalent of carbon; so that an equivalent of starch in order to be converted into fat must lose an equivalent of carbonic acid CO_2, and seven eq. of oxygen.

Since the herbs, roots, barley, potatos, &c., which constitute the food of cows, oxen, swine, and geese, frequently contain no fat, and for the most part, as far as existing analyses have determined, do not contain sufficient to account for the masses which accumulate in the bodies of these animals, a certain quantity of oxygen must, in some way or other, be separated from the constituents of their food to form this material. Liebig represents the proportion of carbon to oxygen in various proximate principles of vegetable food as follows:—

	C	O
Vegetable fibrine	120 eq.	.... 36 eq.
——— albumen ..	120 „	.... 36 „
——— caseine	120 „	.... 36 „
Starch	120 „	....100 „
Cane-sugar	120 „	....110 „
Gum	120 „	....110 „
Sugar of milk	120 „	....120 „
Grape-sugar	120 „	....140 „

While all fatty bodies contain on an average, for one hundred and twenty equivalents of carbon, only *ten equivalents of oxygen*. So that if we suppose fat to be formed in the animal organism, from the compounds of proteine, or from starch, sugar, or gum, 26, or 90, or 100, or 110 equivalents respectively of oxygen, must be separated from the elements of these substances during the process.

According to this view, the system, or some part of it, is capable of deriving oxygen from the food during the formation of fat, as it derives oxygen from the air in respiration; a circumstance which has led Liebig to investigate the relation which subsists between the process of respiration and the formation of fat in the animal body.

At a meeting of the Academy of Sciences in Paris in October last, Messrs. Dumas and Payen stated that cattle, when fattening, always contains less fat than the elements which they have consumed, an opinion derived from the circumstance that these chemists have found a considerable quantity of oil in maize, a seed possessing high fattening qualities. Hay also is said to contain 2 per cent. of oil; they suggest that animals derive their fat, always ready prepared, from the food on which they are fed; but animals may be fattened upon vegetable substances which have not been shown to contain oil or fat; and accordingly, although it should turn out in the progress of discovery, that fat ready prepared is frequently assimilated, yet the opinion that it is always so is by far too exclusive. These facts by no means controvert Liebig's reasonings. The jelly of calve's feet is not derived ready prepared from the milk of the cow, as may be seen by examining the analytical tables, still it is consistent with Liebig's views, that jelly taken as food may contribute to the nourishment of the gelatinous tissues. The latter circumstance does not alter our view respecting the essential nature of the chemical process by which gelatine is formed. In the same way fat must be frequently formed in the animal system, but it may happen also that a diet of oil and fat contributes directly to the accumulation of fat. The latter circumstance does not controvert the fact that oxygen must be extricated in the conversion of fibrine, starch, or sugar into fat, even although it might have some significance as to the relation which may subsist between respiration and the formation of fat, and some of the uses of fat in the animal economy.

A very curious fact is recorded by Dr. G. O. Rees.* A donkey having been destroyed seven hours after a full meal of oats and beans, the chyle was collected from the mesenteric vessels, and examined chemically; it contained 3.6 per cent. of fatty matter. What was the origin of this? According to the analyses of these vegetables they contain no oil or fatty matter. Are the analyses defective, or is the fatty matter the result of the admixture of bile,—a metamorphosis of atoms in the alimentary canal? The fact is consistent with Liebig's theory.

Liebig remarks, that there is only one way in which the formation of fat can take place in the animal body, which is precisely the same as that by which oil is formed in plants, viz., by a separation of oxygen from the elements of the food. He brings forward a most beautiful analogical argument in favour of his views from the economy of the bee. By recurring to Table II. (p. 391) it will be seen that wax corresponds very closely in elementary composition with fat, its formula being $C_{30}\ H_{30}\ O$,

The bee produces its wax from honey under circumstances very similar to the formation of fat in herbivorous animals. The honey being given as food, is taken into the stomach and digested; one portion passes off as excrement, and another is absorbed, and received into the fluids of the insect; it

* Cyclop. of Anatomy and Physiol., art. Lymphatic System.

is then secreted between the scales of the abdominal rings, not as honey but as wax. Honey alone is necessary for the formation and secretion of wax, which takes place in about forty hours, and it is only when bees receive more honey than is required for nutrition, that wax is produced. As in the case of the formation of fat from sugar, starch, gelatine, or albumen, oxygen must be given off in the ecomony of the insect during the formation of wax from honey.

Not alone the process by which fat is produced, but the circumstances also under which it is formed, claim attention. The most obvious and the most remarkable of these is, that an excess of carbon in the diet is a condition favourable to its deposition. But in the stag and hare, animals living on a carbonaceous diet, who take a great deal of exercise, and accordingly absorb a great deal of oxygen, we find little or no fat; the reason being, that the oxygen absorbed during respiration suffices to combine with all the carbon and hydrogen of their food not employed in the nutrition of their tissues. When the carbon of the food, and the oxygen absorbed by the skin and lungs, are in due proportion, no fat is produced. But if with an excess of carbon a diminished supply of oxygen occurs, a condition which may be called abnormal, then an increase of the body takes place, from an increase of substances containing much carbon and no nitrogen, that is to say, of fat. Thus, in the process of fattening animals, far more food is given than the wants of the system require; they are made to repose for digestion only; want of exercise brings a deficient supply of oxygen; the hydro-carbonaceous materials cannot be converted into carbonic acid gas and water, and accordingly they are deposited in the form of fat. If the fattened animal be allowed to take more exercise the fat again disappears. The production of fat in the animal tissues is thus always the consequence of a deficient supply of oxygen. Hence it is that people of great activity, breathing a pure air, whatever their diet, have generally but a small proportion of fat, while the inmates of prisons and workhouses, living upon poor diet, but taking very little exercise, frequently become puffy and fat, and that the same thing occurs in sedentary females.

A large proportion of oxygen being received into the system as compared with the quantity of food ingested, prevents the deposition of fat by combining with the superfluous carbon and hydrogen. Conversely, the absorption of a small proportion of oxygen, as compared with the amount of the ingesta, particularly of non-nitrogenised substances, favours the deposition of fat. This principle applies whether the fat is introduced ready prepared into, or is formed in the system. The formation of fat from the constituents of food must always be attended with the extrication of oxygen.

These facts and their explanation we see are independent of the question whether the fat be introduced ready prepared or formed in the economy. In either case there is an excess of hydro-carbon, and particularly of carbon, deposited in the structures of an animal. In the healthy condition of an ox, or a horse, as to food and exercise, the urine contains benzoic acid with 14 equivalents of carbon, but as soon as the animal is kept quiet in the stable, the urine contains hippuric acid with 18 equivalents of carbon. Thus, we see an effort in the system to get rid of the excess of carbon; yet it is only a small proportion of that excess which can be expelled by the secretions, the remainder being employed in the production of fat. Finally, it seems to be manifest from these considerations, that the accumulation of fat is the result of a want of due proportion between the amount of non-nitrogenised food received by the stomach, and of the oxygen absorbed by the skin and lungs.

We have thus examined the more simple form of nutrition in the carnivora, and we find the same process in the herbivora. We have considered several important modifications in the economy of animals of the latter class; but the use of the non-nitrogenised principles which enter so largely into the composition of their food, the production of bile, according to Liebig, with the evolution of animal heat, remain to be investigated. The following essential circumstance must not be omitted in this place. The

Nutrition of the Young of Carnivora,

which is effected by means of a fluid, the milk, secreted from the blood of the mother, is strictly analogous to that of the herbivora throughout their lives.

Milk contains a plastic element of nutrition, caseine, which nourishes the cellular tissue, muscular fibre, nervous structure, and bones. It also contains non-nitrogenised principles, "elements of respiration" in the forms of butter and sugar of milk.

The caseine is distinguished from fibrin chiefly by its great solubility; no foreign substance is required to convert it into blood. It contains a larger proportion of the earthy matter of bones than blood does, and that in a very soluble form; so that we find in the carnivora at this early period, as well as throughout life, the development of the vital tissues depends on the supply of substances identical with the chief constituents of their blood.

As to the butter and sugar of milk, they contain no soda, potassa, or fixed bases. The sugar is closely allied to starch, gum, and vegetable sugar, all of which contain hydrogen and oxygen in the proportion to form water, with an excess of carbon. There is added, therefore, to the nitrogenised consti-

tuents of the food, carbon, and in the case of butter, carbon and hydrogen. These substances cannot possibly be employed in the production of the essential constituents of blood, because the caseine contains exactly the amount of carbon required for that purpose. Notwithstanding this, they for the most part disappear from the economy; they cannot be detected in the fæces or in the secretions, but, except so far as they form fat, they are demonstrably given out from the lungs and skin in the forms of carbonic acid gas and water. Fat itself is ultimately disposed of in the same way. Thus, whatever metamorphoses the non-nitrogenised principles of food may undergo in their progress through the system, they are ultimately destined to combine with oxygen. This fact is of the utmost significance as respects the uses of these non-nitrogenised substances, not only in the young of the carnivora, but in the herbivora throughout their lives, as well as in reference to the mixed, and for the most part highly complicated diet of the human species.

Belladonna in Phthisis.—M. Delhaye appears to have derived the most signal advantage from the use of belladonna in tubercular phthisis and the tedious nervous cough which is so often the precursor of consumption. He administers the powdered root in a quantity varying from half a grain to a grain, in one or more doses, during the twenty-four hours. Where irritability of the stomach exists, however, he prefers the extract or tincture of belladonna. Of the former he gives about the same quantity as of the powdered root, and of the latter, from twenty to thirty drops during a like period. He says, also, that the tincture is one of the best palliatives of the diarrhœa that supervenes in the latter stages of phthisis. But at all times he regards, as an indispensable condition for the employment of this medicine, that the stomach should be in a tolerably healthy state, a decided contra-indication of the use of belladonna being the presence of gastro-enteritis, so usual a concomitant of chronic disease of the lungs.—*Archives de la Med. Belge.*

Ingredients by the Bushel.—It would seem that the days of mithridate, and such like farragos, are not yet gone by, at least on the continent. The "Journal de Chimie Medicale" publishes the formula of a preparation called "eau hemostatique de Monterossi," consisting of not less than twenty-five different ingredients, among which figure peppermint, pennyroyal, thyme, sage, rosemary, teucrium marum, acorus, bistort root, tormentilla, logwood, cypress, sumach, oak-bark, agaric, pitch! This notable compound is said to be an universal styptic "employée avec succès contre toute espece d'hemorrhagie."—*L'Experience.*

MISCELLANEOUS CONTRIBUTIONS TO PATHOLOGY AND THERAPEUTICS,

By James Richard Smyth, M.D., London.

IMPOTENCE AND STERILITY.

In a paper in The Lancet of August the 28th, 1841, we stated that in the great majority of cases, in either sex, the causes of impotence and sterility would be found, on careful investigation, to consist in some lesion involving the constitution and general health of the individual; of which, there certainly can be little doubt. And the circumstance is easily understood by simply bearing in mind that the reproductive system of the animal, like the flower of the plant or tree, to which it is analogous, is wholly dependent for its primitive evolution, and subsequent vitality and vigour, upon the perfect development and continuous healthy condition of the general system and circulation; and as canker, or defect, of the root, or stem (the parts which compose the vegetable constitution) of the plant inevitably causes its flower to fade and its seed and fruit to wither and fall, so also does disease, or any circumstance which impairs the general powers of the constitution of the animal, debilitate for a longer or shorter time, or altogether destroy, the energies and functions of the reproductive organs. Of this truth, if necessary, numerous illustrations might be adduced.

Let us, by the way, here further notice how very opposite, in the two systems of animals and vegetables, are the positions which Nature has assigned to the sexual organs. The fact is, unquestionably, not a little remarkable. In the one, namely, the animal, we see these organs, with undeviating carefulness, and for reasons better known to Nature herself, removed from the site of immediate observation, and placed in partial cover and concealment; while in the other an arrangement altogether the reverse obtains. The flower, or efflorescence (as it is termed in botanical language), of the plant, which constitutes its reproductive organisation, occupies, not only the most conspicuous part of the vegetable body, but is also invested with forms and colours the most beautiful and attractive. But to be more practical, the following case of

Sexual Incapacity in the Male,

consequent, as we conceive, upon constitutional debility and general disorder of the economy, corroborates, to a considerable extent, the opinions we entertain upon this pathological point. And let us here observe, *en passant*, that the most useful, and, in all respects, satisfactory, mode of exemplifying causes in the unabstract science of medicine is, without doubt, to give the phenomena which accompany them, which result from

and involve them; that is, in short, to state and describe the individual cases of disease, together with their plans of treatment, whether successful or otherwise, and to draw therefrom, if possible, a useful indication and improvement of practice.

Case.—Mr. B., aged 52, a bachelor, a military gentleman, originally of strong constitution, of robust health, and of a cheerful active disposition and warm temperament, which qualities of body and mind he continued to enjoy without interruption up to the age of 40, when he began to experience occasional fits of depression of spirits, with considerable impairment of all his energies, more particularly that of procreation. These ill symptoms continued gradually to increase for some years, accompanied with general emaciation and marked decline of health and strength, until, eventually, he found himself a complete invalid, and perfectly impotent. His appetite, which hitherto, during his sound health, had always been good, but moderate, became voracious; his temper uncertain and irritable, and his mind sad, and often very melancholy; he was subject to drowsiness in the evening, and his sleep during the night was light and unrefreshing; his bowels were always irregular, and their excretions unhealthy, and frequently passed suddenly and involuntarily; his urine was turbid, of a fetid heavy odour, with occasional deposit of mucus, and requiring to be drawn off by the catheter, in consequence of the bladder having lost its expulsive power. For these disorders, which had continued more or less severe during a period of eight or ten years, he had consulted a great number of medical men, some of them the most eminent, and had used a variety of remedies, without material benefit. In consequence of increased and uncontrollable irritability and wretchedness, and of his troublesome discontented disposition, together with his having expressed a distaste for life, and also manifested symptoms of insanity, his friends had latterly considered it necessary to have him placed in a lunatic asylum, or under private superintendence.

When he came under our care, on the 2nd of November, 1838, his condition was nearly as follows:—Much general emaciation and debility; body stooped; countenance pale, contracted, and expressive of deep distress and misery; eyes dull, and irides and eyebrows decolourised; constant depression of spirits, discontent, with sense of sadness and wretchedness; no refreshing sleep, but is disturbed during the night by the slightest noise, and gets up from bed tired and depressed as he lies down; skin dry and harsh, and never feels soft or moist, although he is rolled in flannel and occasionally takes considerable exercise; bowels irregular, their excretions clay-coloured, completely devoid of bile, sometimes fluid, at other times solid, and frequently passed involuntarily and without intimation, as if the bowels were insensible of their presence; urine rather more in quantity than natural, of a whey-colour, and of a fetid heavy smell, and requiring to be drawn off by the catheter (which instrument the patient has learned to use himself), from weakness of the bladder; has occasional attacks of vesical catarrh, during the presence of which a mucous deposit appears in the urine; penis always flaccid and elongated, with a constant gleety discharge from the urethra, and has not exhibited any sexual development for years; testicles much diminished in size, the epididymi quite empty, and scarcely to be felt; appetite immoderate, but no thirst; tongue clean; no discoverable enlargement of the liver or other abdominal viscera; respiration and pulse pretty healthy.

Considering that at present, as from the commencement and during the entire long course of this gentleman's complicated disorders and sufferings, the great and primary error was seated in the liver and bowels, and that it consisted for the most part in suspended, or more or less deficient and depraved secretion from those viscera, we immediately directed our attention and treatment to the rectification of the error, by the revival of their healthy actions, leaving the lesions of the urine, with all other morbid phenomena, to await the result of the restoration of the functions of the digestive canal, which we deemed of the first importance. It was evidently vain and fruitless, we thought, to endeavour to produce any salutary change in the condition of the urine, or of its eliminatory apparatus, or to prescribe, with any hope of advantage, for the distemper of the nervous system, so long as the circulating fluid, and the general economy throughout, received their materials of renovation and support from an *origo et fons* so disturbed and depraved as were the primæ viæ, and the important processes of digestion and of sanguification. Two five-grain pills, composed of the compound extract of colocynth and rhubarb, with three grains of blue-pill, were ordered to be taken every other night at bedtime, followed by a little castor oil in the morning, and occasionally a common enema, if the bowels were obstinate in responding to those aperients, with moderation in diet and exercise. This treatment was steadily pursued for the space of three weeks, or a month, without any other apparent benefit or result than that of having freed the intestines from a large quantity of dark clay-coloured excretions. At this stage of the treatment of the case we received the following communication from the patient himself:—

"Wednesday, Nov. 10th.—Dear Sir, I have taken the pills as directed, viz., every other night. I have had no evacuations of the bowels since Monday, except what has been effected by the enema, a few hard round

lumps, of a clay-colour. The bladder and other infirmities are still in the same dreadful state. My servant is good-tempered, but totally without *capacity*, *energy*, *judgment*, or *memory*, all which requisites are so necessary in my deplorable situation. At three o'clock took an ounce of castor oil. Your's truly, R. M. B." The same remedies were continued, and ten or twelve days afterwards we received from the patient the following note, which still refers to the state of his bowels:—

"Dear Sir, the pills which I took last night have operated when from home this morning. The evacuations still dark-coloured, so that I shall take two more to-night, unless you advise otherwise, and in which case, perhaps, you will send me a note, and defer your visit to-day until to-morrow. Your's truly, R. M. B."

Nov. 30. To-day a plan of treatment somewhat different from the foregoing was commenced, which we intended should operate principally on the liver, and the glandular economy generally. Having advised the adoption of a mild alterative course, five grains of blue-pill were prescribed every night at bedtime, with a five-grain compound rhubarb pill in the morning, and also two warm baths in the week, at the temperature of 100°, to be taken between eight and nine o'clock in the evening, the time of immersion from a quarter of an hour to twenty minutes; the body generally to be well rubbed with a flesh-brush during the administration of the bath; moderation, as before, in diet and exercise.

This treatment, under our own immediate superintendence, was regularly pursued during a period of between two and three months, without any other change or modification than that of having occasionally increased the dose of blue-pill, and intermitted a bath now and again. When it had been continued about a month or five weeks (the alvine excretions during the whole of the time having been more or less of a dark unhealthy character, and with little, if any, discernible improvement, but evidently with no aggravation of any of the other morbid phenomena, mental or bodily) the urine was observed to have lost in a great degree its fetor and turbidness, and to have regained almost its healthy appearance, which the patient was the first himself to remark, having requested us, during one of our visits, to examine his urine, observing that he had either caught a cold, and could not perceive it, or that his urine had lost its disagreeable smell. He stated that he rested a little better, and felt less languid and depressed on getting up. The same remedial measures were steadily persevered in, and the condition of the patient, in all respects, went on gradually to improve.

The next note of the case is on the 21st of the following month, January, 1839, when the system had been for some time under the specific influence of the alterative. Gums slightly turgid, more vascular-looking, and a little tender, but no ptyalism; condition of patient, in every respect, greatly improved; skin more natural and soft, and he frequently has some perspiration on the back and loins during exercise, and in the morning before getting up; he is regaining flesh and strength; he has taken the warm-bath pretty regularly; after the first two or three baths the surface of the water was covered with a coating of powdery furfur of the exfoliated cuticle; the countenance, in every feature, is remarkably improved, it has lost its exsanguineous, melancholy expression, and is acquiring colour and animation; the pigment has returned to the irides, and the eyes have lost their dull inanimate look; the painful sense of wretchedness and destitution from which he had so long suffered is in a great measure removed, and he now feels comparatively comfortable, and disposed for society; he makes no complaint now of want of sleep, and the action of the bowels, instead of being sudden and involuntary, is now quite regular, and the alvine excretions pretty natural; these, however, during the last two or three days, have been rather profuse, and the greater part composed of dark inspissated bile; the urine is now quite clear, without fetor, and natural in quantity, and the contractility of the bladder is so far recovered that more than one-third of the urine is ejected, and with considerable force, before having recourse to the catheter. The penis which, as we have noted, was elongated and lax, is now contracted and firm, and the patient has remarked that it requires more dexterity and force to pass the catheter, in consequence of lessening of the calibre of the urethra. He states that for the last three or four mornings he awoke with erections, which subsided shortly after awaking, and that last night, together with an erection, he had a sexual somnium and emission, occurrences he has not experienced for years; the testicles are firmer, and very perceptibly increased in size, and the epididymi are slightly distended with seminal fluid; his spirits, temper, and habits, are altogether much improved; appetite less immoderate; no appreciable change in the pulse, excepting that it feels a little fuller and softer. The same treatment to be continued.

Feb. 4. Condition of patient still further improved; has had for the last two mornings, on getting up, a copious discharge from the bowels, of dark bilious matter; he states that he feels himself, to-day, in a condition that he has been a total stranger to since the commencement of his illnesses; that he feels himself a new man both in body and in mind; his observation was, to quote his own words, "I find your treatment has not only done a great deal for

my bodily health, but it has also removed the veil from my mind."

5. Advised him to-day to leave off the blue-pill for a time, as he feels exhausted, in consequence of a large quantity of inspissated bilious matter having come from the bowels last night; otherwise no change to be made.

24. About ten days ago commenced to take the blue-pill in the morning, and the compound rhubarb pill at bedtime, and has continued to use these medicines in this manner up to the present time. His health of body and of mind he now considers as re-established, and he makes no complaint to-day but of the troublesomeness of being necessitated to use the catheter to assist the bladder in ejecting the urine, as the contractile function of that viscus has not kept pace with the other improvements; nearly one half, however, of the urine is now expelled without having recourse to the aid of the instrument, and the virile power, which had slumbered, like an animal in hybernation, for some ten or twelve years, under the oppression of the constitutional disease, is now revived, and in considerable activity, as he expresses an intention of entering on the state of matrimony. Advised him to-day to leave off the alterative altogether, and to take a dose or two of the clear infusion of senna with sulphate of magnesia, to clean out the bowels well before commencing a course of chalybeates.

March 2. All treatment discontinued, as he considers himself cured.

Remarks on the Case.

In the truly interesting case of which we have now given a description, it is very evident that although the suspension of the generative secretion, and the prostration of the procreative power, with the conjoint disorders of the urine and bladder, and also the accompanying, and, as we conceive, connected derangement of the functions of the brain, and we will add, too, of the feelings and affections of the mind, had occupied the chief attention of the patient and his professional advisers,—it is very evident, we repeat, from the result of the treatment, that this combination of morbid conditions owed its origin and its protracted existence to obstinate and extensive functional disorder of the liver and of the alimentary canal, with the entire circle of the chylopoietic viscera. We viewed the case at once as one primarily of dyspepsia and hypochondriasis, which had merged into melancholia. Such, it is true, in the complicate picture of disease on which we are now about to offer some observations, our diagnosis, in accordance as we think with the natural disposition of the lesions, had placed in the principal morbid group, and therefore deserving of our first attention. The genito-urinary affections were viewed (as the termination of the case proved they stood) in a secondary light, and, as secondary phenomena, within the shade and under the influence of the constitutional and more general malady. We have never witnessed, at least we cannot at present recollect, within the compass of our own experience, a case of disease in which the resources of medicine were so happily illustrated, and which impressed us, in consequence, with so full an assurance and trust in the principles and reasonable foundation of the healing art, which at one time, and without much exaggeration, perhaps, was considered divine. Just observe the condition of this gentleman during ten or twelve years of his life,—when all the powers of man's mind and body are usually in the summer meridian of their strength and activity, before nature, undebilitated by disease or other causes, for the most part shows little if any decline; the oppressed and woe-begone (to use his own epithet) subject of mental and bodily affliction, ultimately, through the instrumentality of medicine, restored to comparative comfort and tolerable enjoyment of health and of all his faculties,—and then say whether the ancients either over-estimated or over respected that art, in having designated it *divine*, which could produce such changes, and establish such beneficial reformations in organised systems, cast and constructed, and put into life and movement by the Creator alone. What was the state of this patient when we first took charge of his case and recommended our plan of treatment? Here it is. A person whose earthly misery, in all respects, appeared consummate. The fugitive from an asylum,* his reason overcast, but not so darkly as to prevent him from seeing that his understanding was impaired,—the subject, in fact, of madness, and conscious of his condition, the most unhappy of all the unhappy kinds of mental disease; sometimes giving up all use of medicine and all hope of cure, and endeavouring to become resigned to his fate, and applying for comfort and consolation to that rarely-failing source, religion. Then, again, either at the suggestion of his own disturbed feelings, or at the advice of some compassionate friend, betaking himself to some new physician or surgeon, adopting his instructions, and pursuing his mode of treatment.

This is but an imperfect epitome of the moral pathology (if we may be allowed the expression) of this gentleman's condition for no little time previous to our administering to his relief. What was his physical state? Stooped and tremulous, with debility and emaciation to atrophy, impotent, as he had

* He had left the Denham-Park Asylum rather unceremoniously a short time before, for a time only, as it proved, to add to the number of his disappointments in his efforts and anxiety to recover health.

been for years, in the power of generation; every important organ of the body, in fact, with the exception of those contained in the chest, either perverted or defective in function. This state of things, as has been seen, was very manifest with respect to the liver, the stomach, and the whole continuous chain of viscera, from the duodenum to the rectum. The secretions into, and the excretions from, that extensive tract in which digestion, the business of organic development, begins, in which the food undergoes its first transformations, and the blood assumes its first forms and properties of vitality, were in an extreme degree unhealthy, and the peristaltic and expulsive action, as a direct consequence, was also much disordered. The fetid condition of the urine, with the partial palsy of its receptacle, the bladder, were united, we conceive, in the relation of cause and effect, the defective contractile function of that viscus, like that of the contiguous intestinal canal, having been the result, no doubt, of the long-continued contact of their unnatural excrementitious contents upon their lining membranes. These membranes, it is not out of place here to observe, of every viscus and vessel of the body, are endowed with a peculiar sensibility, independent of that they may have received from the brain or spinal marrow, which the celebrated and finely philosophic Bichat termed "organic," by which they are kept in constant harmonious relation with the different substances, solid or fluid, with which they may be in contact, and which, in the institutes of our economy, it is a principal function of their respectiveorgans, either for a time regularly to retain and eject, or regularly and immediately to transmit, so long as these substances present the qualities and the conditions that correspond with and characterise their healthy state.

It is this physiological circumstance, or ordination of the economy, viz. (the constant action and reaction upon each other of the contents, and the containing viscera and vessels), that the intestinal tube (with all its numerous tributary ducts, the semino-urinary receptacles and passages), and the heart (with its continuous arterial and venous canals), owe the existence (at least the unceasing manifestation and exercise, during life), of their contractile functions—the functions of elimination and of circulation,—which functions, as we have endeavoured to explain, act harmoniously and to the well-being of the individual during a healthy and perfectly-constituted state of the more important excretions and of the blood; but during an opposite and depraved condition of those parts, such as prevailed to an extreme degree in the case now under consideration, instead of harmony from reciprocated action with concurrent health, discord and disease reigns throughout.

The humoral pathology, notwithstanding that it is made to contain, according to the doctrines of the early writers upon it, a great many fancies, and what might very properly be denominated *false facts*, still abounds with many grave and important truths, which, to prescribe with success for many diseases, it is highly necessary to be conversant with; for example, the diseases of gout, rheumatism, scurvy, scrofula, the green sickness of young females (temporary sterility of the blood?), with many others that we might enumerate, are all unquestionably affections primarily of the blood and humours, which are only to be cured or materially meliorated, we believe, by remedies that ply their virtues chiefly to these parts, and produce some salutary change in their qualities and conditions.

As a therapeutic fact, is it not deserving of some little attention, the length of time, from three to four months, without interruption, which this patient continued to use the mercurial oxide with the most beneficial results? The warm baths, by the manner in which it was observed that they softened and improved the skin, and by their giving a temporary agitation and change to the circulation, and also by their in some degree promoting absorption and secretion, contributed something, it will be allowed, towards amending the condition of the case; but the principal remedial agent, that which finally accomplished the cure, and restored the sufferer to the enjoyment of health and the possession of all his powers, corporeal and mental, was unquestionably the alterative pili. During the first three weeks or month of the administration of that mild remedy we had no little trouble with our dispirited patient in pressing him to persevere in its use, as he stated he had been advised by several eminent physicians not to adopt such a course of treatment, as they considered it more likely to aggravate his complaints than to cure or alleviate them. But how differently did he find the effects of the condemned treatment themselves speak, simultaneously. Exactly with the appearance of the general and specific action of the medicine on the system, the condition of the patient in every respect began to amend. This was not distinctly discernible until after the lapse of between six weeks and two months; previous to which time, and to this commencing amendment, let us mention, we had no criterion or other encouragement to persevere in the course we were pursuing than that the stomach and system bore the remedy without having exhibited any signs of irritation or intolerance; which, considering the nature and usually slow mode of operation of the medicine, and the chronic character of the maladies we were ministering to, was as much, perhaps, for the time, as could reasonably be expected.*

* "In acutis morbis cito mutetur, quod nihil prodest; in longis, quos tempus, ut

The impotence and sterility which existed in this case for so long a period, and which forms a remarkable feature in its history, from first to last, were manifestly the effect of causes seated in the constitution of the individual, and not in the local generative organisation. Was not such sufficiently proved by the general mode of action of the remedial measures employed, and their coincident, yet consequent, *modus medendi?* We prescribed no aphrodisiac, or particular local irritant, whatever. The testicles (the glands which secrete, as few are ignorant of, the spermatic fluid), resumed their long-suspended functions as soon as the general glandular system (on the development of the alterative excitation), was roused from its torpor and urged into activity and healthy action; and so of the penis (the excretory, or, rather the ejaculating, duct of the testicles) recovered its power of erection when the vital secretion, for the transmission of which, during the generative act, the erectile power of the member, and its state of erection, to perfect the purposes of nature, are requisite and indispensible. In this instance of impotence, then, would we not be correct in concluding that the incapacity of the penis was not an idiopathic* and primary morbid condition, but a sympathetic and secondary one, the result of the sterile state of the testicles? and this latter lesion, again, had it not its cause in the constitution, namely, in the digestive and melancholic affections we have been considering?

In a former paper, already referred to, upon subjects similar to the present ones, we took occasion to state we were of opinion that an intimate connection existed between premature defect, or destruction of the power of procreation, and more or less mental disorder; any farther observations we have had an opportunity of making upon this interesting and important point of pathology since the publication of that paper, have not given us reason to alter, in any respect, the opinions there expressed. We look upon the matter as certain, as a *fact*, indeed, of not less regular occurrence than most others in medicine.

As in the case which forms the subject of the present contribution, it is often difficult, nay, impossible, to determine whether it has been the sexual disease which has caused the mental, or *vice versâ*, for the two affections undoubtedly, we think, reciprocate each other's existence; that is to say, when these maladies are observed together in the individual, in one instance it will be found that insanity has been the cause of the sexual infirmity, and in another this latter will, in a great measure, have been the cause of the mental ailment. Considering, however, the nature of the treatment, and the process of recovery, in this particular case, we are rather disposed to think that inveterate indigestion, aggravated derangement of the functions of the chylopoietic viscera, was in a great degree the common parent of the other principal disorders present, namely, of the melancholia and impotence. Melancholia, in fact, as one form of mental malady, is always, we believe, associated, whether in the male or female, with some sort of debility or derangement of the generative economy, but whether as cause or as effect we cannot in the present state of our knowledge positively say. How frequently, in the young female, do we find the generative lesion of amenorrhea united with melancholia. And the remedy or treatment, whatever it be, which restores the uterine secretion, seldom fails to cure the melancholy; but more upon this subject at another time.

43, Sackville-street, Dec. 1, 1842.

facit, sic etiam solvit, *non statim condemnetur, si quid non statim profuit; minus vero removeatur si quid saltem paulum juvat, quia profectus tempore expletur.*"—Celsus, lib. iii., cap. i., p. 112.—(Universæ Naturæ Vir Prudens.—Columella.)

* We have lately repeatedly prescribed for a case of impotence in a young gentleman under thirty, in which the defect appeared to us to be confined principally to the penis itself, the structure of the organ having lost the power of sufficient and continued erection from, as we conceived, physical deterioration, the effect of early depraved abuse.

Remarkable Fistula.—Cure.—M. H. Larrey communicated to the Academy of Medicine, at one of its late sittings, the case of a woman with a complicated fistula, caused by the inflammation of an ovarian cyst, which had formed a passage both into the bladder and through the parietes of the abdomen in the hypogastric region. By both passages viscous and purulent matters, with calcareous and hairy productions, were discharged from the cyst, till, at last, a large calculus was formed in the bladder, which, blocking up the entrance to the urethra, obliged all the urine to be passed through the abdominal fistulous opening. M. Larrey having determined to remove the primary cause of the evil, enlarged the abdominal fistula by a bold incision, and extracted from the ovary a tumour, to which a long mesh of hair was found attached. He then passed an instrument from the cyst into the bladder, from which he extracted a calculus having an ovarian production of a hairy nature for its nucleus. This serious operation was completed with the happiest results, and a catheter, retained in the bladder, insured the subsequent discharge of the urine by the natural passage, and favoured the closure of the fistulous opening and cicatrisation of the incision. An attack of confluent small-pox retarded the progress of the cure, but the patient afterwards regained perfect health.

TABLE OF MIDWIFERY CASES.

To the Editor of THE LANCET.

SIR,—I send you an account of two thousand two hundred and fifty midwifery cases, and the most remarkable circumstances connected therewith, because it is from such documents alone that correct conclusions can be derived, and the profession furnished with sound data for calculating the probable average departure from a state of nature and safety. This report may be made much more interesting and complete, and when I can find time I will try to make it so, by adding the diseases that are consequent upon delivery, the treatment and results, with the causes which in some instances produced premature labour, and those which rendered instrumental assistance necessary, with such further observations as may seem useful and important. I remain, Sir, your most obedient servant,

GEORGE YEATES HUNTER, M.R.C.S.
Margate, Nov. 17, 1842.

Number of cases	2250
Males	1180
Females	1019
Number of natural cases	1838
Premature cases	63
Abortions	99
Of which the sex was developed in 19.	
Cases of turning	17
Delivered with forceps	25
Case of craniotomy	1
Still-born children, at full period	23
Of which two were first children, four had been dead some time, five were breech presentations, and one was a case of hæmorrhage.	
Ditto, premature	22
Of which two were breech presentations; the others dead some time.	
Cases in which the funis was round the neck of the child	223
Children born with cawls	43
Deformed cases	15
Of which three had six fingers on each hand, one acephalous, in two the spine was exposed, one spina bifida, two club-feet, two had hare-lip and open palate, and one had the toes united. One imperforate anus, one had rudimentary fingers on the left hand, and in one the abdominal viscera were mostly contained in the expanded umbilical cord.	
Presentation of funis	3
Ditto, of feet	6
Ditto, of breech	53
Ditto, of arm, &c.	7
Ditto, of face	7
Ditto, of face to ossa pubis	82
Many of these were revolved, and thus made natural presentations.	
Twin cases	24
Of which eight were girl and boy, four were both boys, twelve were both girls, and five were first children.	
Convulsions	5
All ended favourably.	
Flooding cases	11
Of which nine were successfully treated.	
Placenta attached over os uteri	8
In these cases I turned and delivered eight, and they all terminated well.	
Placenta removed	38
Hour-glass contraction	10
Mania	3

ON THE NATURE AND CURE OF

BLINDNESS PRODUCED BY OIL OF VITRIOL.

By ROBERT D. THOMSON, M.D., Conductor of the Laboratory, and of the Classes of Practical Chemistry, in the University of Glasgow.

AT the meeting of the British Association which assembled at Glasgow in 1840, the author proposed an operation by which he considered that blindness, or opacity of the cornea, produced by the action of sulphuric acid, might be remedied. This view was grounded on the following considerations:—The basis of animal matter, according to the most recent researches of chemists, appears to be a substance termed protein, consisting of $C_{40}\ H_{31}\ N_5\ O_{12}$, which can be readily prepared from albumen, fibrin, &c., by solution in caustic alkali, and precipitation by acetic acid. This substance appears to be a base, and combines with acids. When sulphuric acid is brought in contact with it a fine white substance is formed, which may be obtained in the state of a white powder by careful washing and drying. It may be conveniently produced by triturating the crystalline lens of the eye in a mortar, along with sulphuric acid. This acid is termed *sulpho-proteic*, and its formula is $Pr + SO_3$.

The conjunctiva, the membrane which covers the cornea, or transparent part of the eye, contains as its basis *protein*. If we, therefore, bring sulphuric acid in contact with this membrane, *sulpho-proteic* acid is formed, and opacity of the transparent cornea takes place. This is the result when by accident, or intention, sulphuric acid falls, or is thrown, upon the person. It was a case where this corrosive liquid was thrown, criminally, at the head of a man, that attracted the author's attention to the subject. He found, by making a series of experiments upon the eyes of dead animals, that when sulphuric acid is applied to the cornea a layer of sulpho-proteic acid was produced,

which may be removed by means of a sharp-edged knife; and that, even after dissecting off the first layer, a second application of the acid will produce a new layer of sulpho-proteic, which may be excised or torn off in a similar manner; and in this way that the whole of the cornea may be successively divided into a series of layers corresponding in some degree with the natural structure of that membrane. This method presents, in short, an excellent mode of demonstrating anatomically the layers of the cornea. Having found that the opacity was completely removed by the excision of the layer of sulpho-proteic acid, on the dead animal, it was conceived that the idea of performing the operation upon a living animal was justifiable. Accordingly, a dog was selected as the subject of experiment. It was properly secured on a table, and a muzzle was applied, so as to prevent it from using its teeth. It was considered also that it should be kept as steady as possible, in order to give a fair chance to the experiment. The end of a glass rod, dipped in oil of vitriol, was rubbed over the transparent part of the eye. White opacity was produced in a few seconds. The action was allowed to continue for two minutes, the eyelids being carefully kept aside. In order to prevent the acid from extending to the mucous membrane of the eyelids, a piece of lint, dipped in a solution of carbonate of soda was then applied to the eye, and the animal left at rest for five minutes. On removing the lint the cornea presented a white appearance, and was obviously quite opake. Having secured the eyelids, the conjunctiva was removed by means of a pair of scissors, assisted by a scalpel and forceps, and the denuded cornea was then scraped by means of the scalpel, until it appeared to be deprived of its white opacity. A slight degree of dulness remained, which appears to have proceeded from the exudation on the surface of the cornea, for in a day or two the perfect transparency of that membrane was restored, and the animal lived for many weeks with complete vision of the eye. Dr. Krauss, of Keppel-street, London, who assisted the author in the experiment, and to whom the dog belonged, satisfied himself that the eye which had been operated on retained as perfect vision as that of the other eye, until the accidental death of the animal.

The author has been induced to give publicity to this successful experiment, because he considers that he has seen eyes which might have been probably restored to vision, if the operation had been performed *immediately after the receipt* of the injury. The animal did not appear to suffer pain, except when fluid came in contact with the lid.

*** We have found this curious and interesting suggestion in the "Proceedings of the Philosophical Society of Glasgow," No. 3, 1842.

CASES IN WHICH THE

VAPOUR OF PRUSSIC ACID

WAS EMPLOYED FOR THE CURE OF

OPHTHALMIC DISEASE,

By Donald J. Maclean, M.D., Lic. Roy. Col. Surg. in Edinburgh.

I have been induced, for my own satisfaction (in consequence of some observations made by Sir George Sinclair, who had witnessed its effects on patients under Dr. Turnbull's care), to give a very extended trial to the prussic acid in cases of ophthalmic disease which might be considered suitable for its application, and desire that the results of some of the cases should be submitted to the consideration of those of our profession who may take an interest in the subject. I have, therefore, made out a report of the following cases. In our present state of knowledge it is impossible to explain the *modus operandi* of the prussic acid; it will be sufficient, meantime, to observe accurately, and merely give the results of treatment. In what kind of cases it will be found most suitable can only be determined by further inquiry and experience. If however, the results prove permanent, the prussic acid must occupy a very high place amongst our remedial agents; and, possessing stimulant properties of a peculiar character, it may prove useful under many circumstances where diseases of the eye are not readily amenable to ordinary treatment.

Case 1.—J. Mackay, Reay, aged 11 years. Diffused opacity of the cornea, the result of a protracted attack of scrofulous ophthalmia. The vapour of strong prussic acid was applied, daily, for thirteen days, by exposure of the eye to it, during which period the cornea gradually got transparent. On the fourteenth day no remains of former opacity existed, and the vision of that eye was perfectly restored.

Case 2.—Margaret Mackay, Thurso, aged 12 years. Severe rheumatic ophthalmia of three weeks' duration. She complains of deep-seated aching pain in the eyeball, greatly aggravated in the evening and through the night; no apparent disorder of the general health. The ordinary remedies were used, viz., leeching, blisters, calomel, and colchicum: they appeared to give no relief. The prussic acid was applied, daily, for about ten days; the relief following each application was extraordinary; the pain was trifling for the rest of the day. At the expiration of twelve days the intolerance of light, the injected state of the vessels on the sclerotica, and the other symptoms, entirely disappeared; and since September the little patient has continued quite free from any symptom of her former ailment.

Case 3.—A girl named Munro, from Mount Pleasant. Albugo of corneæ in both eyes, the result of an attack of acute con-

junctival ophthalmia, which she had about two years ago, whilst residing in Dundee, where various means were tried for her relief. Vision was almost completely destroyed; she could not distinguish the outlines, form, or colours, of objects presented to her. At her own urgent request, but without holding out any prospect of her being benefitted by it, the prussic acid was applied daily for about six weeks. 11th day.—She states that she can see some objects; the corneæ appear more transparent. At the end of another week she was able (in the presence of Sir George Sinclair) to state the names of some objects, and to recognise, with accuracy, the colours of a variety of flowers which were presented to her in order to test the degree of progress that had been made. She can now walk out and home to her own residence (a distance of a mile and a half from Thurso) without assistance. The improvement continues to be progressive, and the corneæ are now comparatively translucent.

Case 4.—Sinclair Sutherland, a labourer, aged 26 years. Staphyloma of one eye and occlusion of pupil in the other, from effused lymph. In the centre of this there was a small opening which would admit the point of a fine needle. The prussic acid was applied, daily, for about three months. Felt great relief in the staphylomatous eye since its application; the prominence of cornea diminished at least one-half, and though formerly opake, from repeated attacks of inflammation and ulceration, it is at this date quite translucent. The effusion of lymph in the other pupil has been disappearing gradually, and the pupil is now about four lines in diameter. The patient is quite sensible of the improvement taking place, and can now name various objects presented to him.

Case 5.—Mr. Alex. Macdonald, jun., merchant, Thurso, has suffered for the last six months from an affection of the retina, characterised by the following symptoms, viz: obscurity of vision, excessive intolerance of light, and deep-seated pain in the orbit. The external appearance of the eye is quite healthy, and the motions of the iris are natural, ascribable, he says, to too great application to business, and night reading; and, in many respects, the symptoms resemble those of inflammation of the retina. The ordinary treatment of this affection was resorted to with some benefit, and the eye kept constantly shaded; but the deep-seated pain continued, and the patient was getting uneasy. The prussic acid was applied, daily, for about six weeks. The relief obtained was great, and at the expiration of one month all the former distressing symptoms had totally disappeared, but I thought it advisable to continue the remedy for some time longer. The patient can bear a strong light with impunity, and exert his eyes on any object, however minute, without uneasiness, and is now quite well.

Case 6.—Mrs. M'Kenzie. Capsular cataract of one eye, of three or four years' duration. By way of experiment, the prussic acid was applied for about five weeks, daily. Absorption of the diseased structure was slowly taking place all this time; it has now entirely disappeared, and vision of this eye is quite restored. The result in this case was very satisfactory.

Case 7.—Mrs. M'Beath. Suffered for many years past from a disease combining the characters of conjunctival and sclerotic ophthalmia. The prussic acid was applied, daily, for about three weeks, and at the expiration of that time the redness and angry appearance of the eye disappeared; the organ looked clear and healthy, and no pain whatever was felt. The patient can bear a bright light without uneasiness, and is now free from any symptom of her former ailment.

Thurso, Caithness, Dec. 20, 1842.

Iodide of Potassium in Atonic Ulcers.—The utility of the hydriodate of potass in secondary syphilis is pretty generally acknowledged. M. Lisfranc has employed it with success in ulcers of long standing, which have resisted other modes of treatment. A man, sixty-eight years of age, was admitted under his care at the Hôpital de la Pitié, who had for eight years had two obstinate atonic ulcers on his left leg; one of which, five inches in length, extended round the limb for more than half of its circumference; the other was about two inches in diameter. The only topical application used was simple cerate and charpie, but M. Lisfranc prescribed a scruple of the iodide of potassium daily, which quantity he subsequently increased to six grains every six hours. At the end of six weeks the health of the patient had become greatly improved; his flesh generally had acquired firmness; his face was ruddy; and he had even gained fat. The smaller of the two ulcers had completely disappeared in twenty-five days, and scarcely one-tenth of the larger ulcer remained to be healed. In two months the man left the hospital perfectly cured.

Lactate of Quinine, the claims of which to the notice of practitioners appear to have been known some time ago, has somewhat recently found an advocate in Prince Lucien Bonaparte. Among its advantages over the sulphate, enumerated by the prince, the chief seems to be its greater solubility.

A WARNING TO THE BLIND. DR. TURNBULL.—PRUSSIC ACID. REFUNDING OF FEES.

Mr. J. B. Estlin, surgeon, of Bristol, has recently printed, in a contemporary journal, a statement relating to the application of prussic-acid vapour to the eye, of which the following are the prominent facts. This paper is entitled "On the Pretended Cure of Cataract by Prussic Acid," and is prefaced by a few observations on the subject generally:—

I am induced (says Mr. Estlin) to illustrate, by a case, the folly of trusting to the promise which has been held out that *cataract* may be cured by the external application of the vapour of prussic acid. To any educated surgeon it must be unnecessary to prove the futility of attempting to remove a cataract—a hard tumour, nearly in the centre of the eye, covered by a rough membranous capsule, ceasing, probably from disease, to have any organic relations with surrounding parts—by the application of a vapour to the cornea. The removal of opake deposits upon the cornea itself by similar means I believe to be equally impracticable, but I now confine my remarks to cataract. Though frequently asked by patients if I had heard of the powers of prussic acid in removing diseases of the eye, I was not aware of the monstrous pretensions that had been set upfor it in newspapers and other periodicals not devoted to medicine, until the following patient came under my care:—

Mr. C., a draper, came to me from Somersetshire, on the 13th of Oct. last, respecting his left eye. He was labouring under acute sclerotic inflammation, extending to the chambers of the eye, with the usual pain and intolerance of light. The anterior chamber was rather hazy, and the lens opake, but its surface was too clouded to be distinctly defined. The treatment was clearly indicated. I recommended leeches, fomentations, mercury till the gums were affected, and the application of an opiate solution within the lids. The patient said that he had for some time had cataract in the eye, but Mr. Soden, of Bath, had advised him, as the right eye was very perfect, not to undergo an operation upon the left. Having seen an article copied from the "Literary Gazette," stating upon the *authority of the editor*, that a certain physician in London cured cataracts by the vapour of prussic acid, he went to London and placed himself under the care of that practitioner, who gave him every encouragement to believe that the cataract would speedily be dissolved, and daily applied the acid, expressing himself satisfied with the progress of the cure. At the end of three weeks, finding his eye not improved, Mr. C. said he could remain no longer in London; the physician then *performed an operation* upon the cataract, with an instrument, which was followed by the violent inflammation that I saw, and, while suffering from it, he was obliged to return into the country. But I will quote his own words, subsequently conveyed to me in a letter, omitting some natural expressions of indignation, declaring his wish to have publicity given to his case, for the benefit of others. "For four consecutive weeks," he writes, "did he apply the prussic acid to my eye. The method was this. I applied to him; he examined the eye; he professed to restore it to perfect health *in a few days* by the prussic acid. He applied it to the eye; each successive day he appeared to discover an improvement; repeatedly he declared to me that he had known a cataract dissolve in twelve hours after the application of the acid. I consequently expected to awake some morning in the possession of brilliant sight. He did not perform the operation which has caused me so much agony, till three weeks had expired, because not till that time, he said, had the prussic acid *made the cataract to form on the surface of the eye*. During this attendance I paid the usual physicians' fees." After pursuing the plan that I had prescribed for him (says Mr. Estlin), the pain and inflammation subsided. Neither the prussic acid, however, nor the operation, had dispersed the cataract.

Such is one of these attempted cures. I adduce it as an example of measures that are utterly inadequate to the professed object, employed with the most unwarrantable promises of success, their insufficiency being admitted by recourse to an operation, which also proved unsuccessful. It induced me to refer to the statements which tempted this unfortunate patient to submit himself to the prussic acid treatment. I have in vain tried to procure in this city the back numbers of the "Literary Gazette;" but "Chambers's Edinburgh Journal" for July 16, 1842, speaks of the "Literary Gazette" for July 11, 1842, as containing an account of the wonders performed by prussic acid, "the name of whose editor," says the Edinburgh journalist, "is a sufficient guarantee for the accuracy of the statements." These statements are, that the editor of the "Gazette" *saw* the various stages of cure in "opacities of the cornea, inflammation, cataract, amaurosis, iritis, &c., the various appearances of films removing, cataracts breaking up and being gradually re-absorbed, pupils being re-developed, and other cases of the wonderful production of vision to those born blind." The editor exclaims, "Why not at once make known this discovery to the Prince of Hanover!" and concludes by saying, "We hesitate not strongly to recommend this wonderful discovery for the cure of blindness." Surely these editors cannot be aware of the extent to which they are misleading the public.

The conductors of our respectable periodicals should consult some judicious medical friend before giving circulation to such extravagant statements relating to diseases.

Mr. Estlin does not mention the name of the "physician," in this melancholy case. But he might, without any breach of professional etiquette, and with no great strain upon his courage, have stated that the visit of the unfortunate draper was paid to Dr. Turnbull, in Russell-square. Here is an appendix to the case, in which no concealment of any kind is observed.

Amongst other recent dupes of Mr. Jerdan's "Gazette" was a gentleman residing at Camberwell, who, also, was labouring under cataract of the left eye, and the manner of his being caught was this:—A friend, on finding that he was "blind of one eye," asked him "why he did not go to Doctor Turnbull, the most wonderful oculist of the day," adding, that if he doubted the fact he should read the "Literary Gazette" of July last. The afflicted gentleman thought it best, however, to visit the editor himself, and therefore called at the office, and asked for Mr. Jerdan, who was not visible, but an attendant behind the counter answered for him, and assured his interrogator that "every word of the praise was true, and a great deal more." The applicant thereupon hesitated no longer, but, like the draper of Bath, forthwith "placed himself under the care" of Dr. Turnbull, who gave to him, as he had given to the draper, "every encouragement to believe that the cataract would speedily be dissolved," commencing at once by the application of a bottle—supposed, by the patient, to contain prussic acid—to the affected eye, for the alleged purpose of conveying its vapour to that organ. This occupied two or three minutes, and the cost of having the bottle held to the cataract was half a guinea a visit, and then the patient was sent home again.

The like proceeding continued, one day after another, until the patient had paid *twelve guineas* to Dr. Turnbull, who, during the whole period (borrowing the draper's words), "kept expressing himself satisfied with the *progress of the cure*, each successive day appearing (professing) to discover an improvement." But after the payment of twelve guineas the patient saw no better, and had become uneasy at the draining of his purse. So the *venue* was changed, and the patient directed to stay at home, and *receive* the visits instead of *making* them. The cataract was "now about ripe for an operation,"—an announcement which surprised and frightened the patient, who had heard only of the cure by prussic acid. But he was assured that it was all right. The "bottle-rig" was only the *preparatory* proceeding, and the patient being very anxious to see with both eyes, was presently calmed down to the necessary assent.

"But pray, doctor," said the patient on this occasion, "should I make no preparation for the operation? Do you order no medicine, or anything of that sort?"

"Oh, no, my dear Sir," replied the doctor, "none is necessary; that is not *my* treatment. *I* go to work another way."

"Should I make no change in my diet?" (The patient is a plethoric genetleman, apparently an easy subject of inflammation.)

"Not at all, my dear Sir, not at all. You have only to stay from business for a few days, and I'll come and do it for you. At present the eye is going on beautifully. Other surgeons prescribe medicines in such cases, for they pull the eye about, so that it is necessary, but I don't."

Accordingly, on Wednesday, Oct. the 12th, Dr. Turnbull, arrived in a fly, or cab, with his footman, to perform the operation. The footman held back the lids, a wound was effected, and the two operators departed, taking no fee for the "operation."

This novelty of taking no fee the patient failed to comprehend, as also did his good lady, whose penetration, nevertheless, needed no couching, but enabled her, she said, "to see what the doctor was from the first," and not much to his advantage, but she could produce no effect on the mind of her husband, though now and then a misgiving crossed him.

"Are you certain," said he, one day, to the doctor, "that I shall see after this operation?"

"Oh! *certain*. I'll forfeit my head if you don't."

Five times did Dr. Turnbull take the trouble to come and go after the "operation," at two guineas a time, receiving *ten guineas* more of the unfortunate patient's money, doing nothing, prescribing nothing, only inspecting the eye, talking about it, and pocketing fees.

Presently a violent inflammation of the sclerotica arose, affecting also the adjacent textures, becoming, before the next visit, a subject of great alarm to the patient; but the doctor strenuously denied that there was anything *wrong*. No antiphlogistic or other medicinal treatment, therefore, was adopted. The eye, he affirmed, over and over again, was "going on beautifully; *beautifully*; it could not do better." The patient was only "to live low, avoiding beer and wine."

One Sunday, at four o'clock, the doctor rode up to the door, as usual.

Patient: "I am sure that all is not right with my eye, doctor; it is terribly inflamed, and the swelling is very great."

Doctor: "Oh my dear Sir, that will all go down. If I attempted to stop it I couldn't. It will melt like butter."

"Are you sure?"

"*Sure?* Upon the honour of a Scotchman."

* * * * * *

"But how *could* you believe him?" asked a friend, subsequently.

"*Believe* him, indeed," replied the patient. "Why, I couldn't suppose the fellow would lie so. He kept taking his oath it was all

right; and I had such a character with him. He came again on that day fortnight, when the eye was worse than ever; yet, continued the patient, "as soon as he saw it he cried out, 'You're cured, you're cured;' and then he lent me these spectacles (four pairs of lenses, fit for the short sight of a fly). I was to suit my eyes with them, and he declared that he'd forfeit his life if I did not see to pick up a pin across any part of the room, and read the smallest print in the world in a week. He insisted over and over again that I was quite cured; *quite*, he said. Then I handed him *six sovereigns and a half* to take six guineas out of, for the visits since the operation, but he had a glass of wine, and was off at once with the six pounds ten, and I've never seen him since. My apothecary watched the case all through, but said he couldn't interfere, and I thought myself, that as the doctor said so, it was all right. But I found how wrong he was, and wished to have some one else, and I am now under the care of a regular surgeon, for I was not only quite blind with the left eye, but the other had become so affected by the operation, that I could hardly see my hand before me."

Having thus obtained a correct view of these transactions, the patient authorised a neighbour to call on the doctor, and request that, as the promised cure had not been performed, and as he declined to take either the Scotch honour, or the head, or the life of the doctor, though all were pledged and forfeited, and had been so grossly deceived and tortured, the fees he had paid should be returned. Accordingly, on the 12th of December, his friend went to Russell-square, but the doctor was "particularly engaged." The visitor said he could wait, so he was shown up stairs. Half an hour elapsed, when a servant came in, eyed the visitor askance, dusted the chairs, and disappeared. In another half-hour the footman walked in to look about. "Will the doctor be long?" inquired the visitor. "Archdeacon Bailey is with him, Sir." (A useful patient in the house.) Thirty minutes more passed, and then "the archdeacon was gone," and the interview obtained. The doctor at once politely bowed and scraped. The visitor wore spectacles, and looked like another good subject.—"Prussic acid, operation, Harris's lenses, a glass of wine, and *off*, —ten guineas, twenty guineas, thirty guineas, and so on!"—Dr. Evans Riadore, we understand knows an unfortunate patient who did not escape under *sixty*,—very blind.

"I have called from Mr. Humphries, of Camberwell," said the visitor (presenting his card), "in the first place to return these spectacles"——

The words had not quite escaped his lips, when the doctor made a sort of jump at *the name*.

"Oh! indeed! Mr. *Humphries!* How is he, pray? Dear me, how *is* Mr. Humphries?"

Visitor: "Not only no better, Sir, but considerably worse since he fell into your hands, and" (the speaker went straight to the point) "how you could have the assurance to tell him, when last there, which was on Sunday week, that he would soon see to pick up a pin in any part of the room, and read the smallest print in the world, neither he nor I can understand."

The Doctor: "Oh, my dear Sir, I must go over and see him again, then."

Visitor: "Oh, certainly not, Sir: he has no wish to see you again, even if he could; and, to tell you the truth, he has been to another doctor, and as you have not only been useless to him, but have deceived him, and done him much injury, he has sent me to demand a return of the fees."

The Doctor: "Oh, but I shan't do that."

Visitor: "No, I didn't expect that you would; but I am at least come to ask it, and to tell you, moreover, that I mean to go from this house to THE LANCET office, and state the whole case, for the editor to publish it if he thinks fit."

The doctor here made another great jump, and tried to catch the speaker's hands, for a friendly shake, exclaiming, "Oh, but my dear Sir, you musn't do that!"

Visitor: "But I certainly shall, for I look on the whole transaction as a wicked imposition, of which the public ought to be warned."

The Doctor: "Well, but if Mr. Humphries really wants the fees again, I'll return them. I'll send him a check to-night."

Visitor: "Very well, mind that you do, and cross it in case of a loss, but if you *mean* to pay, you had better pay me."

The Doctor: "But how do I know that you are authorised to receive the money?"

Visitor: "Why, the spectacles ought to prove that."

The Doctor: "Ah, to be sure;" whereupon he unlocked an escretoir, and produced three five-pound notes, and said, "This is an earnest of what I mean to do. I'll give you these now, and to-morrow you shall have the rest. I would draw a check to-day, for the whole, but that would keep you too long."

Visitor (taking the fifteen pounds): "This looks as though you meant to return the money; I can wait for the check, however."

The Doctor: "But I really forget what the fees were. So get me the account on paper from Mr. H. himself, and I'll *send* the amount."

Visitor: "I had better call for the balance, in case you forget it, and I will be here for it at twelve o'clock to-morrow."

So saying the visitor left, but the doctor, taking counsel, and screwing his courage up to the sticking point, sent a friend at night to the patient.

* * * * * *

"Pray, Sir, was the claim to-day made with your authority?"

"Yes, Sir, it was."

"Then I beg to expostulate against the demand."

"Sir, the doctor's proceedings were abominable. If he does not understand eyes, nor know inflammation when he sees it, he is not fit for his business. Look at the eyes yourself. Ought any doctor to turn out of hand such a case as that, saying the patient was perfectly cured, and would in a week see to pick up a pin at the farthest part of the room, and read the smallest print in the world?"

The doctor's friend replied that he was "no doctor himself, but belonged to a newspaper, and did not come about the eyes, but to know why the patient had authorised any one to ask for the fees again. The friend of the patient," he said, "had used threats, and made a great noise in a house full of patients, and frightened the doctor out of the fifteen pounds, and the promise to pay the balance."

(All this charge about threats and noise, the patient says, was only "impudent assertion, as the friend he sent was one of the quietest men in the world.")

On the 13th the doctor broke his promise about the balance, and sent a lawyer's letter to the patient instead, repeating the question (by his attorney) whether the application for the fees was made on the patient's authority. No notice, of course, was taken of this inquiry, but a letter was prepared to say that if further trouble was given to the patient about the fifteen pounds, the attorney should be charged before a police court for attempting to obtain money under false pretences, and the whole affair exposed. A second, and a third, application have been made to Dr. Turnbull, for the balance, amounting to 14*l* 12*s*, but without success, and it seems to be probable that the money will not be recovered excepting by an action at law in the Court of Queen's Bench.

Having stated at the commencement of this narrative that there should be no concealment on any point respecting it, we here inform our readers that the patient of Dr. Turnbull was Mr. John Humphries, of No. 30, Peckham-grove, Camberwell; that the visitor who acted as the friend of the patient was Mr. Benjamin Tipper, of No. 31, Peckham-grove, Camberwell; that the medical gentleman who "watched the case throughout, but could not interfere," was Mr. Charles Brown, surgeon, of No. 2, Brunswick-terrace, Camberwell-road; and that the surgeon under whose care, at the recommendation of Mr. Brown, the patient has placed himself, preparatory to undergoing the operation for cataract (the eye, even at this time, being in such a state of inflammation that many weeks must elapse before even active medical treatment can fit it for the process), is Mr. Richard Partridge, of New-street, Spring Gardens, Professor of Anatomy at King's College, Strand.

THE LANCET.

London, Saturday, January 7, 1843.

The discoverers of truths in medicine, in these dominions, possess abundant means of making known their facts. Medical journals, medical "Transactions," and medical publishers, exist in sufficient numbers to ensure the freest communication of events and opinions between the members of the scientific world, and there can be no doubt that every principle, and nearly every valuable truth leading to a principle in the healing art, which is detected amongst us, finds its way into circulation, ensuring for itself, in some shape or form, general acquaintance and consideration. If a useful truth escape examination to-day, or in the current year, its oblivion is not certainly determined on that account. There is always a large body of industrious, spectacles-mounted gentlemen on the look-out for materials wherewith to construct manuals or epitomes, dictionaries or cyclopædias, designed to bring the *ars medendi* up to the "latest point;" who discover those facts which fall aside, as well as those which are foremost in prominence, and who seize and marshal them for the reference of theorists,—whether with good judgment or not, is another matter. Thus, a certain amount of notoriety is attained for whatever is valuable in medicine,—whether it be the product of accident or of design, of observation or protracted research, in this country.

But freedom of communication with the public in these matters is not all that is demanded on behalf of the "interests of science,"—a modern phrase, more quickly understood than interpreted. The purposes of vanity, of creators of error, of trifiers in literature, and even of the common quacks, are all served by the same valuable engine, which not seldom acts as though it had put forth with sincerity the invitation "Evil, be thou my good!" Much confusion results. The valuable and the worthless announcements

jostle in the roads where the latter should be confined to the hedges and ditches; but the police of medicine is not competent to separate them, to enable the former to march quickly and determinately to the proper goal of scientific facts.

At *some* date in our history there must exist a remedy for this disadvantage, a tribunal whose sound and impartial judgment will be ensured by the mode of its appointment, sitting in conference upon the chief disclosures of medical scholars, in order that certainty, as to the leading principles of the art, may succeed to perplexity,—a superintending body, ordering and designing (aided by the resources which Parliament can place at its command), and inviting, receiving, and discussing plans, inquiries, and discoveries in the art, for that great national project and end, preservation of the public health. It cannot justly be said that *any* national tribunal of science would be better in this country than none; for jobbers and intriguers—men of the Roget School—might soon defeat the honest purposes of the association; but, certainly, medical reformers must look wistfully to the formation of a British Academy of Science, established to promote the objects here indicated, its utility promising to be proportionate precisely according to the manner of its election.

We lately contrasted in this Journal the different conditions of two great kingdoms whose respective sanitory wants were and were not ministered to by national means; and our attention is now again brought to the subject by some other of those numerous circumstances which keep arising on the Continent in favour of the plea for a medical chancery at home, whose duty and pride should be expended on the proper adjustment of questions carried before its bar, whether by private individuals or the public departments. Joining his very rational hopes on this subject with our own, the English reader receives with pleasure every new illustration of the working of neighbouring tribunals of medical record and investigation. Such an one occurs in the following brief report, extracted from the *Bulletin* of the French Academy, for Dec. 15th, last. We give it without further comment,—for documents of this kind tell their own tale and convey their own "moral,"—reserving a remark or two on the object of the communication, for the close of the article:—

Report *made to the* Academie Royale de Medicine, *by order of the* Minister of War, *relative to two severe Cases of Disease attributed to the Sting or Bite of a Venomous Animal.*

Gentlemen,—The Minister of War transmits to the Academy an account of two severe cases of abscess which are attributed to the sting of a venomous animal that had bitten two prisoners who were condemned to be shot, after having passed a night in the prison of Montaign, at the department of La Vendée.

The Minister, in forwarding to you this detail, expresses a desire to receive the opinion of the Academy (when it has examined the facts) respecting the nature of the disease; and he also desires you to point out to him *the means to remedy it*, as well as to inform him what animal is capable of causing such disastrous consequences. The following is the account, addressed, by order of the minister, to the general-commandant of the division, by Dr. Baré, prison-physician at Nantes.

Two condemned prisoners were lodged, for one day only, in the prison named, where they passed the night of the 1st of July. Next day they were sent on to Nantes. There, on undergoing an examination by the surgeon, both were found to have a slight inflammatory swelling of the skin. In one, the swelling was on the left thigh; in the other, on the fore-arm of the same side. The subjects themselves attributed these swellings to the venom of an animal which had bitten them the night before. In both cases there was a small round bluish-looking wound, about one-twelfth of an inch in diameter (*deux millimetres d'etendue*), from which a sero-purulent humour flowed. The cellular tissue round about was puffy, the skin tense and shining. The symptoms presented were those of weak local inflammation only, there being but little, if any, fever or pain.

In one of the men, named Chabert, the wound, which was on the forearm, suppurated, and an abscess was formed in the subcutaneous cellular tissue; but this having been opened, the patient had quite recovered by the tenth or twelfth day.

In the other subject, named Barray, a fluctuating abscess also formed, under the wound, which was on the thigh. An inci-

sion was practised, which gave issue to a flow of pus, intermixed with dark-coloured blood; but a few days afterwards violent pains were felt in the groin and hip. The extremity became greatly swollen, and infiltration extended to the articular bursæ, and the integument of the abdomen. Bleeding, leeches, and a large blister, were employed; but purulent absorption continued. The right (?) lung became engorged, and the pleura and peritoneum filled with fluid, and on the 11th of August, more than a month after the bite, the man died.

The subsequent examination displayed the cellular tissue infiltrated; all the lymphatic glands engorged, and of a bright red colour, and several in a state of suppuration. There was a large abscess in the left iliac fossa, communicating with the deep-seated regions of the thigh and hip, and of serum in the abdominal and thoracic cavities. Inflammation and hepatisation of the two inferior thirds of the left lung existed.

Such are, Gentlemen, the most important circumstances in the history of these cases. The physician who has reported them by order of the minister, thinks it right to add, that the individuals who stated that they had been bitten, could not, as they say, owing to the darkness, specify by what animal. The latter has been searched for in vain; but supposing it to have existed, the physician has conjectured it to be a kind of spider, *l'araignée des caves.*

Here ends the narration of the circumstances which actually occurred. The members appointed by the Academy to examine into the matter of the report, indicated their doubt that the disease resulted from a spider's bite; by which, indeed, two perforations, instead of one, would have been produced. They rather suspect that the wounds were caused by some pointed body, impregnated with putrid or otherwise poisonous matter. It is probable that a suspicion that the wounds were voluntarily inflicted by the men themselves, may (as much as motives of humanity) have influenced the military authorities in making their appeal to the Academy. But the fact of the appeal speaks strongly in favour of the uses of such an institution to a government under whose care are placed so many branches of the public service. Whether its aim in this instance may have been to ascertain the truth on a point of medical jurisprudence, or with the honourable object of alleviating or preventing the sufferings of even condemned prisoners, the purpose still demands our regard, and at the same time forces upon us the reflection that where the means of appeal do not exist, both objects would be neglected, and their effects missed.

At page 547 of this week's Lancet will be found a report of proceedings of the Parisian Medical Society, an institution to which we beg to direct attention in this country. It is exceedingly gratifying to scientific and patriotic Englishmen to find proofs of talent and energy among their own countrymen abroad. The continental medical schools have generally attracted a large number of the most studious and enterprising amongst our young medical men, possessing the means of travelling, to improve their medical education at the sources of instruction which are so liberally opened on the continent to medical visitors. Paris constitutes the head-quarters of this annual swarm of travellers, in consequence of French liberality as regards its scientific institutions, and the number of talented men in every department of science to be found in that capital, the extent to which French medical literature is cultivated in Great Britain, aiding to promote the emigration. In addition to the numerous medical men going from the British Isles, there are always in Paris many representatives of medical science from the United States, the East and West Indies, and our various colonies. Until a few years ago,—being unconnected by any other tie than the pursuit of the same scientific objects, and lost, as it were, in a vast capital,—they, whether learners or the learned, seldom met, and had no means of exchanging with each other their knowledge. A few Edinburgh physicians first conceived the idea of connecting these scattered elements, and in 1837 they established the Parisian Medical Society, under the presidency of Dr. John Hughes Bennett, one of the members. The society was soon joined by a considerable number of the English medical men practising or studying in Paris. At first the society had many difficulties to encounter, including, at one time, the opposition of the Paris police, which for several months prohibited its meetings, under the pretence that it might conceal some political movement. Gradually, how-

ever, the perseverance of its resident members established the society on a firm footing, and it now ranks among the first medical societies of Paris. Since 1837 it has numbered above three hundred and fifty members, representing the medical doctrines of every school, and the experience of every clime. The gentlemen who have successively filled the post of president are, Dr. J. Hughes Bennett, Sir Robert Chermside, Dr. Ricord, Dr. Macloughlin, Dr. Mott (of New York), and the present president, Baron Paul Dubois, professor of midwifery at the Faculty of Paris. The society receives all the leading British, American, and French reviews and journals, and has a small but increasing English and French library. Its meetings are weekly, for evening discussions, and possess the eminent advantage of acting as landmarks, or rallying points, in the foreign capital, for strangers in pursuit of medical knowledge. The council, which is at present composed of Messrs. M'Carthy, M'Moran, Olliffe, T. H. Wakley, Giles, Ewing, and Bennett, have this winter adopted various useful measures for increasing the advantages of the society to medical visitors in Paris who speak the English language, and we now prominently notice the society in order to press on other English students who may visit Paris the utility of joining an institution which can materially assist them in their studies. Feeling that a scientific body thus circumstanced must elicit valuable scientific matter at its meetings, we shall occasionally report its proceedings in this Journal.

NEW CORONER IN DURHAM.

A vacancy, as we mentioned last week, is expected to take place shortly in the Chester Ward of the northern part of this county. Mr. M. Hill, the present coroner, has been too infirm for the last twelvemonths to fulfil the duties of his office (which he has held for twenty-five years), and they have during that period been executed (under the licence of the Bishop of Durham, who has hitherto been the patron) by a deputy, Mr. M. Favell, of Gateshead. A recent change in the law has placed the election in the hands of the freeholders of the county. Two candidates have started for the office, Mr. Favell, and Mr. Edward Nixon, of Darlington, a surgeon, formerly of the Coldstream Guards, who, in his address to the electors, thus adverts to the medical points of the question:—

"During the last few years considerable discussion has taken place, as to whether a legal or a medical coroner was best adapted to the duties of the office; and the test to which the question has been brought in the practice of the metropolitan county of England has greatly strengthened the opinion, before very generally entertained, that a knowledge of medical science is the most material qualification for the peculiar functions which a coroner has to perform. I have been for upwards of thirty years engaged in active professional pursuits, both as an army surgeon (in the Peninsular war under the Duke of Wellington) and as a private practitioner. I have, therefore, had more than usual opportunities of witnessing instances of death occasioned by violence, in various forms, and of discriminating between these and deaths arising from natural causes; and I can produce the most satisfactory testimonials as to professional ability and character from some of the highest medical authorities in the public service."

The views of Mr. Nixon are supported by the *Durham Chronicle*, in the number of which paper for Dec. 30th, the following observations on the subject are made by the editor:—

"Mr. Nixon is a medical gentleman of many years' standing and experience: Mr. Favell does not appear to belong to any profession. In other counties the question has frequently been mooted whether a member of the medical or one of the legal profession was best calculated to perform the functions of coroner. It is a subject on which, generally, much may be said on both sides; but in the particular case before us it seems to us that the argument is altogether on one side, the medical skill of Mr. Nixon having no counterpoise in any legal knowledge or ability that his non-professional adversary is at all likely to possess. Whatever course, therefore, the freeholders might feel disposed to take, in a contest between a medical and a legal candidate, we think it is quite clear, in a case where a medical gentleman is opposed to one who has neither legal nor medical qualification, that the medical candidate has pretensions which the short and limited services of his opponent cannot reasonably be permitted to over-ride. The appointment ought not to be determined by any consideration but that of fitness, in point of moral character and scientific attainment, whether legal or medical, as may be deemed most conducive to the purposes for which the office now exists. We hear rumours, indeed, that attempts will be made to impart the character of a political contest to the election. We strongly deprecate the adoption of any such expedient on either side."

We observe in the same newspaper a long letter on the subject of coroners by an elector

of the ward, Mr. W. Brignal, who writes with some share of learning on the subject, but not with equal good sense in every part. If he will not object to being taught a better reading of the law relating to the object and duties of the office of coroner, perhaps Mr. Nixon will take the trouble to lend to him the several recent numbers of THE LANCET in which the editorial articles on inquests in sudden deaths have appeared. A careful examination of those articles will prove to him that the freeholders would act very unwisely and dangerously in supporting Mr. Nixon on the plea contained in the following passage of his (Mr. Brignal's) letter:—

"The second candidate, Mr. Nixon, appears to be a medical practitioner, who served in the Peninsular campaigns, has been for upwards of thirty years engaged in medical practice, and has had ample opportunities of witnessing violent and sudden deaths. The two great arguments in favour of the appointment of Mr. Nixon (his qualifications being admitted) are,—First, that it would be unnecessary to hold the great number of inquests which help to swell the county expenditure; for the law says, that 'Coroners ought not, in general, where a party dies by the visitation of GOD, as from apoplexy, fever, or the like, nor in any case, unless a very doubtful one, unnecessarily to obtrude themselves into private families for the purpose of instituting inquiry;" and a medical coroner, in preference to any other coroner, would at once collect information that would enable him, in many cases of sudden death, apoplexy, or in cases of fever and consumption, to decide without summoning a jury."

The statute law demands the inquest to be held when the death has been *sudden*, and does not *in such cases* allow the coroner to receive as true the representations of interested parties who surrounded the deceased at the moment of death, or found the party dead, and then forego the inquest. The question is one of the highest importance in relation to the purposes of the office.

PARISIAN MEDICAL SOCIETY.

THIS society commenced its present winter session on Nov. 10th last, with the Baron PAUL DUBOIS for its president, when the following brief OPENING ADDRESS was delivered by

The PRESIDENT.—This society, after the ordinary interruption of its meetings, is about to resume its scientific business for the winter, but before proceeding farther, allow me, Gentlemen, to address a few words to you, who will listen to them with the same indulgent attention that I have already so often received from the society.

The science to the cultivation of which we have all devoted our exertions, is certainly one of the most capable of satisfying a high-spirited mind, but there certainly is none that requires in a higher degree the resources of human intelligence and perseverance in observation. It is to the study of medical science that those admirable words, "Vita brevis, ars longa, experientiâ fallax," were applied by one of the most useful geniuses of which mankind could ever boast; and this brevity of our natural existence becomes a cause of error when we wish to take experience as our guide, our experience being too brief to enable us to form from it infallible inferences. These facts invite those who are engaged in the practice of medicine to unite their faculties to compensate the insufficiency of their individual labour. Such has certainly been the origin, and such must be the object, of all societies whose end is the progress of medicine. Amongst them the Parisian Medical Society holds an honourable rank, placed, as it is, under the most favourable circumstances. The liberality of France has thrown open to its members, as well as to every scientific inquirer in this country, the most abundant sources of information in every branch of medical science, and it enjoys, moreover, the rare and precious privilege of being attended by professional men whose medical education and experience have been acquired in various regions of the world. Its discussions, therefore, are free from the prejudices of the prevailing doctrines of any country, and may reflect the various opinions of most of the great medical schools. This advantage, I have no doubt, you will carefully preserve, and in your scientific communications and discussions you will always maintain that independence of mind and earnest desire for truth by which alone our art can really be promoted.—(*Applause.*)

SEAT, AND SPECIFIC AND DISTINCTIVE CHARACTERS OF RHEUMATISM AND GOUT.

Dr. OLLIFFE then read a paper, setting forth, first, the numerous disadvantages attendant on a systematic mode of studying pathology, applying these considerations to gout and rheumatism. He then gave an historical analysis of the opinions of authors on the nature of rheumatism, particularly canvassing the doctrines of Sydenham and Stohl, maintaining that no deductions could be drawn from them as to the nature and seat of rheumatism. According to Pinel the seat of the affection resided in the fibrous tissues surrounding the articulations. Bichat agreed with Pinel, and both those pathologists distinguished two sorts of rheumatism, the *fibrous*, properly so called, and the *muscular*. From the period of Sydenham's death up to that of Pinel and Bichat, no important works on the subject appeared in England. Dr. Olliffe said that he did not agree with either Pinel, or Bichat, who both maintained that the

phlegmasy of the synovial membrane was unconnected with rheumatic affections. Chomel in his work on Rheumatism laboured under the same mistake. Dr. Olliffe founded his assertion on the uniform existence of an inflamed state of the synovials in all the cases he had met with in which a post-mortem examination had been practicable, and on the impossibility of establishing during life a distinctive diagnosis between articular rheumatism and any other inflammation of the articulations, whether it were styled simple arthritis, or synovitis. To maintain what he advanced, he cited M. Bouillaud's opinions, and narrated the results of several autopsies which he had himself made and observed in the hospitals. With respect to muscular rheumatism, the following passages occurred in the essay of Dr. Olliffe:— From the pathological appearances so completely and frequently demonstrated by Bouillaud and others, I am at a loss to conceive how so perspicuous an observer as Chomel could have written the following words, namely, "The pathological anatomy of acute articular rheumatism is unknown in the present state of science. Those physicians who have had the opportunity of opening the bodies of persons who have died of acute rheumatism, have found no lesion whatever in the parts which appeared to be the seat of the rheumatic affection." Notwithstanding my respect for M. Chomel (says Dr. Olliffe) I differ from what he says relative to the absence of pathological lesion in articular rheumatism, but as to muscular rheumatism he is decidedly right. Are we not, therefore, authorised to reject, to a certain extent, the admission of the disease termed *muscular rheumatism?* Is it not more than probable that the pains called *rheumatic*, which occur in the continuity of the limbs, the pains without apparent lesion of the principal viscera, such as the heart, stomach, liver, kidneys, &c., are merely neuralgic; and that the only genuine rheumatic pains are those which reside in the articulations? Will you call sciatica *rheumatism?* How will you designate idiopathic pleurodynia? Will you call it *rheumatism?* No; it is neuralgia. Dr. Olliffe concluded this part of his essay by the following propositions:—

1. Rheumatism is an affection of the fibrous tissue of the articulations; but its principal seat is in the synovial membrane, though the inflammation may extend, consecutively, to the neighbouring tissues.

2. In many cases articular rheumatism is accompanied by pericarditis or endocarditis.

3. In fatal cases the post-mortem exhibits the synovials inflamed.

4. Very frequently no vascular arborisations are observed, but then there are blotches of an uniformly deep-red tinge.

5. The synovials are sometimes destroyed.

6. The cartilages, or fibro-cartilages, are found, consecutively, thickened, ulcerated, softened, or tumefied.

7. The heads of the bones are sometimes found enlarged, or ulcerated.

8. The effusion is either completely purulent, sero-sanguineous, or consisting of synovia mixed with pus or albumen.

The author then passed to the study of the pathology of *gout*. After giving a brief historical account of the opinions entertained by the different medical schools, from the earliest period down to the present day, he endeavoured to establish, in a series of propositions, that the peculiar seat of gout is in the fibrous tissues; that its only peculiar and pathognomonic character consists in the deposition of tophi; that it cannot properly be called an *inflammation*, because in no single instance has suppuration ever been observed; and, finally, he founded his distinctive diagnosis between gout and rheumatism, and between these and all other diseases, on the anatomico-pathological appearances, and on the different conditions, as to age, sex, constitution, position in life, &c., under which the diseases manifested themselves.

Mr. Henry Bennet dissented from Dr. Olliffe with regard to the nature of gout and rheumatism. About two years ago he performed the autopsy of a woman who died at La Pitié while labouring under very recent acute rheumatism. The synovial membranes of the articulations affected were all evidently inflamed, presenting a most beautiful vascular arborisation, but the fibrous tissues surrounding were also slightly tumefied and softened. He (Mr. Bennet) had made several other post-mortem examinations of persons who had died when labouring under a more advanced form of the disease, without finding the synovial membranes much affected, the principal lesions being those of the fibrous tissues. He also thought that Dr. Olliffe had improperly confounded rheumatism with simple and traumatic arthritis. In the latter the disease pursued a regular course, going through all its periods in the articulation first attacked, whereas one of the principal characteristics of rheumatism was its migratory nature; its tendency to pass from one articulation to another, a tendency which showed that the local inflammatory symptoms were merely the manifestation of a general morbid diathesis. What that diathesis was, it was difficult, if not impossible, to say, in the present state of science. He was surprised to hear Dr. Olliffe assert the non-inflammatory nature of gout. That the local inflammation which constituted the principal symptom in an attack of gout, differed from inflammation originating in other causes, no one could deny; but to maintain that the heat, swelling, pain, and redness, &c. &c., which were always observed in an acute attack of gout, did not constitute inflammation, was to refuse to the

word inflammation the meaning which all pathologists attached to it.

Dr. Olliffe, in reply, referred to the post-mortem examinations in M. Bouillaud's hospital, to corroborate his statements with reference to the seat of rheumatism. He also challenged Mr. Bennet to produce a single case of suppuration in that malady.

Dr. M'Moran agreed with Mr. Bennet in his observations on the inflammatory nature of gout, or, at least, of its local manifestation. It was too evident to be denied. He was by no means prepared to admit that the absence of suppuration in gout, even if satisfactorily demonstrated, proved its non-inflammatory nature. He also considered Dr. Olliffe's views on the neuralgic character of muscular rheumatism as erroneous.

Dr. Douglas expressed surprise at the innovation sought to be introduced into the pathology of rheumatism. He thought the term "muscular rheumatism" was very appropriately applied to the pains so often felt in the muscles after exposure to cold and wet. In his opinion the seat of such pains was in the muscular fibres, and the appellation "neuralgia" decidedly improper.

Dr. Olliffe defied the preceding speakers to point out a single anatomico-pathological appearance in muscular structure indicating inflammation, after the manifestation of the symptoms alluded to. He maintained that in almost all instances the seat of the pain sufficed to trace the anatomical course of the nerves; that in no case was there inflammation in "muscular rheumatism," which constantly exhibited the chronic type.

Mr. H. Bennet readily admitted that in many instances neuralgia existed when muscular rheumatism was diagnosed, but he could not allow that this was generally the case. He thought that the aponeuroses inclosing and separating the muscles, were frequently the seat of the inflammation in cases described as cases of muscular rheumatism. In rheumatism the pains felt in the continuity of the limbs, generally presented the same migratory character as the articular inflammations.

Dr. Olliffe again asserted the correctness of his views with regard to the nature of the so called "muscular rheumatism," views which were based on the absence of any lesions furnished by pathological anatomy calculated to prove the existence of a muscular affection. The disease commonly called muscular rheumatism was essentially different from simple inflammation of the muscular fibre, or hyolitis, which was of very rare occurrence.

MEDICAL STUDIES AT BRUSSELS.

To the Editor.—Sir: Devoted as is that estimable journal, The Lancet, to the interests of the rising medical generation, I should express in its columns my surprise that no English students of medicine find their way to Brussels, were there not a probable reason supplied in the fact that they must be unacquainted with the advantages there offered to them; yet at Brussels we have a large, handsome, airy city, with a climate not unlike that of England, excepting that it is superior in dryness, and that fogs are less frequent and less dense in the former. Living is very cheap here, for although the *market* prices are but little below the smaller towns of Great Britain, yet competition, and the affluence of strangers, have an immense influence upon the amounts for which articles can be bought in Brussels. Decent board and lodging may be obtained by students for 3*l.* a month, and 4*l.* will effect the object handsomely and comfortably. The medical school, forming part of the university, has been established since 1836. The students in it are few, the opportunities numerous. There are two civil hospitals and one military, containing together upwards of eight hundred beds. Excellent lectures on chemistry, botany, mineralogy, comparative and human anatomy, physiology, surgery, and the practice of medicine, are daily given during ten months of the year, and there is a liberal supply of subjects. All the consequent advantages of these things are obtainable for the annual charge of 8*l.* 10s, without extras. The chemical professor, M. Koene, is as skilful as he is indefatigable. Gluge is known as a physiologist to all Europe, and Seutin has recently been demonstrating his system of bandaging in the London hospitals. There are many other teachers in the university on whom I could bestow well-merited praise. In a word, in all branches, except practical medicine, much may be learned; and even in that, the do-nothing system on the one hand, and bleeding and gum-water on the other, may be watched in their effects, whilst pathological anatomy and auscultation are pursued with advantage. As to relaxation, since the bow of science cannot always be strung, pleasant walks and rides in summer; in winter, coffee-houses and clubs of a superior description, and an excellent theatre, afford varied and innocent recreation, on the most moderate terms. The pit of the opera, which may be named immediately after that of Paris or London, costs 1s. 4d., and students are admitted on still lower terms.

The chief impediment is unacquaintance with the French language, which a few months of practice may overcome, whilst the acquaintance with foreign men and manners has a humanising effect upon the mind, which all wise persons have appreciated from the days of Homer to our own. I remain, Sir, your admiring reader,

John Perkins, M.D., M.R.C.S.L.

Brussels, Dec. 20, 1842.

OBITUARY.—We have this week to announce the death of Mr. ROBERT BENJAMIN WALKER, one of the surgeons to St. George's Hospital. He died on Monday evening, at his residence, in Curzon-street, May-fair, after a severe illness of only four days' duration. We shall be enabled, in another number, to give some particulars of Mr. Walker's professional career, and of the malady which has taken him thus early from the ranks of the profession.

ROYAL COLLEGE OF SURGEONS IN LONDON.

LIST of gentlemen admitted members on Friday, Dec. 23, 1842: J. Drury, F. Morgan, W. Peskett, H. Horsfall, D. Sinclair, J. Percival, W. H. King.—On Friday, Dec. 30, 1842: J. S. Mackintosh, G. Geere, T. Evans, T. S. Blackwell, H. Hutson, W. A. Rackham, C. Evans, W. S. Britton, H. Cooper, R. Jones, J. Mullins, N. Buckley.

BOOKS RECEIVED.

The Life of Sir Astley Cooper, Bart., interspersed with sketches, from his note-books, of distinguished contemporary characters. By Bransby Blake Cooper, Esq., F.R.S. In two vols. London: J. W. Parker, 1843. 8vo, pp. 448 and 480.

An Exposition of the Pathology and Treatment of Tubercular Phthisis. By Samuel Flood, M. R. C. S. L. London: Simpkin, 1842. Pp. 82.—[*.* A little volume, of which, in describing its contents by-and-by, we shall have to give a very high character.]

The Physical Diagnosis of Diseases of the Lungs. By W. H. Walshe, M.D., University College. London: Taylor and Walton, 1843. Pp. 307.—[*.* Another volume respecting which the same remark may be here made.]

The British and Foreign Medical Review for January, 1843. J. Churchill.

The London Medical Gazette for Dec. 30, 1842. Longman and Co.

The Microscopic Journal for January, 1843. Van Voorst.

The London and Edinburgh Monthly Journal of Medical Science, edited by Dr. J. R. Cormack, for January, 1843. J. Churchill.

The Annals of Chemistry and Practical Pharmacy, to Dec. 30, 1842. Longman and Co.

The New York Lancet, edited by Dr. J. Houston, to Dec. 10, 1842.

The Philadelphia Medical Examiner, to Nov. 1842.

"Health of Towns," being an examination of the report and evidence on Mr. Mackinnon's Bill, and of the Acts for establishing cemeteries around the metropolis. London: John Snow, 1843. Pp. 131.—[*.* Very like the case of a toad under a harrow, the question naturally arising, what personal object the toad had in getting there—the foolish toad!]

A Letter to the Board of Guardians of Upton-upon-Severn Union. By George Sheward.—[*.* A recent number of the *Worcestershire Chronicle* contains a report of an investigation into the conduct of Mr. George Sheward, as medical officer of the Upton Union, on a charge of neglecting a sick pauper. The above is a printed copy of a letter to the guardians on that subject by Mr. Sheward. By a reference to the *Worcester Herald* and *Guardian* newspapers of Dec. 17th, and to the *Chronicle* of Dec. 22nd, we find that a general impression is entertained in the union that the defence of the surgeon exonerates him from blame in the matter. The whole question, however, is too complicated and extensive to be entered on with any advantage in these columns, and we are, therefore, content with saying so much as is stated above on the subject.]

Third Report of the Crichton Institution for the Insane at Dumfries. Pp. 36.

The Cyclopædia of Practical Surgery, edited by Wm. B. Costello, M.D. Part 12. London: Sherwood.

NEWS AND CORRESPONDENCE.

EXPOSURE OF OKEYISMS IN AMERICA.—Lately, at Richmond, U.S., much noise was made by the proceedings of a Mr. French with a course of alleged experiments on mesmerism, whereupon, for the public satisfaction, a committee of physicians was named to investigate the subject, which they did with the requisite care to prevent collusion, on the 16th Nov, terminating the inquiry with the following resolution:—"That after a careful examination of the experiments conducted by them, at the Exchange Hotel, on the girl Emma, and those previously performed on Mr. Pepper, at the same place, on the 6th instant, they are *decidedly* of the opinion that they do not tend in the *least degree* to establish the claims of mesmerism."

The following remarks, in a letter in the *West Kent Guardian*, for Dec. the 31st, is, perhaps, just explicit enough to warrant the inference that the poor-law commissioners confirm appointments, in the unions, of surgeons who are members and licentiates of other colleges and companies than those of London:—

"1st. The poor-law commissioners do not require union surgeons to nominate two substitutes to officiate in their absence. They require only one.—2nd. The board of

guardians did not dismiss my qualification, but referred the matter to the poor-law commissioners, and they have decided that I am qualified to hold the situation to which I have since been appointed. I can state, from experience, that medicine and surgery are as well taught in *Dublin* and *Edinburgh* as in London, if not better. The licence of the *College of Surgeons of London* would be waste paper in my case, and cost me £50 or £60 to obtain it, and afterwards be of no use to me.—W. DRURY, Deptford, Dec. 28th."

JANUARY 1, 1843.—*To the Editor.*—Sir: Passing over the remarks of Dr. Willshire on the varied subjects of Phthisis, Bronchitis, &c., in THE LANCET of Dec. 31st, allow me to ask whether the subscribers to the Fore-street Dispensary are aware that their charity is expended on balsam of copaiba for administration in clap, "according to the American plan, namely in the acute stage," &c.? I aways thought that dispensaries were instituted for ministering to the sick and deserving poor only, and not the lustful and depraved; but if venereal patients understand, through the medium of THE LANCET, that their complaints are to be cured gratuitously at dispensaries, "the results being perfectly satisfactory," then I think that both the "lancet" should be applied to the subscription-list, and the "pruning-hook" to the medical staffs of those institutions. Your constant reader, ANTI-GONORRHŒA. — **** The Lock Hospital, our correspondent may remember, is *a charity*.

VAGINAL DISCHARGES IN CHILDREN.—In answer to "C." (Dec. 24), I beg to recommend the nitrate of silver, in solution, for profuse vaginal discharges in children, using from ten to twenty grains (according to the age), dissolved in an ounce of distilled water, previously cleansing the vagina by repeated injections of tepid water with a male syringe, and then dipping a tolerable-sized camel-hair pencil into the solution and coating the whole lining membrane of the vagina with it freely once a day. I have never known it to fail. It is of the utmost importance, however, to keep the parts clean. This can be done by throwing up warm water, as already mentioned. Follow the nitrate with olive-oil, or melted sperm ointment, used, also, by means of a hair pencil. These proceedings will, I am confident, effect a complete cure.—M. H. GIBSON, Surgeon, Glasgow.

CONSUMPTION.—Mr. J. Murray wishes to be allowed to remind the profession that "the principles which he many years ago eliminated in his 'Remarks on Consumption,' seem to be the *true* elements of ultimate cure, if he may judge by the steady progression of medical research and opinion towards their adoption. Contrary," he says, "to the then prevailing systems of bleeding and depletion, conjoined with the minimum of sustenance, I uniformly advocated a generous diet, so considering the disease essentially as one of debility. Inflammatory action to be curbed, or checked, or subdued, by the exhibition of small doses of chlorate of potassa, &c. I have lived to see these principles, once repudiated, now triumphant. I also advocated the cautious respiration of nitrous acid gas, evolved from nitrous acid in an open vessel, and, of course, developed in atmospheric air,—on these simple and unerring principles, namely, that the curative agent, to be efficient, must be brought in contact with the seat and surface of disease; and this, in the case of the lungs, can only be done through the medium of respiration. The healing agency of nitrous acid on external ulceration is recognised. Why doubt its power when conveyed to ulceration in the lungs? More recently the cells, or cysts, of the tubercles have been proved to contain morbid deposits of *salts of lime*, as carbonate, muriate, &c. Now these calcareous matters would be decomposed by nitrous acid vapour, and, forming nitrites, or nitrates, would originate a salt, eminently soluble, to be *absorbed* by the system, or expelled in respiration. I have yet to learn that *a rationale* so simple and satisfactory is elsewhere to be gained, whether chemically or physiologically considered."

F. S.—Perhaps the part could be excised by ligature, or might be subdued by lunar caustic. But we could give no opinion apart from hearing a history of the case, nor then would do so without personal examination, which it is not our custom to render.

The *West Kent Guardian* for Dec. 31st, last, contains a voluminous report of an inquest held at Deptford, on the 27th ult., on the body of a woman, aged 26 years, who had died, as was supposed by the parochial officers, through the neglect of Mr. Arthur, the parish-surgeon, "who had been engaged to attend her during her confinement." Whether sufficient or not, certainly, according to the evidence of the witnesses, only a very small amount of attention was shown to the case by Mr. Arthur, and after two adjournments of the inquest, an examination of the body was conducted by Dr. Waller, of Finsbury-square, London, who made the following statements and remarks:—"There was a pallor, from excessive loss of blood, not only of the skin, but those parts which are generally more red after delivery were nearly white and very flabby. From the appearances, the loss of blood must have been exceedingly great. Diarrhœa was consequent on the loss of blood, and many people die of this. The case ought to have been watched. It is of no use waiting for actual dilation of the uterus, but the delivery must be made as soon as it is dilatable. The case ought to have been watched from day to day. The whole of the body was preternaturally bloodless. No other thing had

taken place to cause death. Deceased ought not to have been left until a proper knowledge of her state had been acquired." The jury having consulted together about three quarters of an hour, returned the following verdict: — "That the deceased died from diarrhœa brought on by hæmorrhage, and that there was great want of skill and attention on the part of Mr. James Arthur." the reporter of the *Guardian* adds, "On the verdict being returned, Mr. Arthur rose, and addressing the jury, said he despised their opinion, and treated with the greatest contempt their paltry decision." (Much confusion and cries of 'shame.') This might have been the natural language of an annoyed and angry, but not of an innocent, person.

An Old Observer.—The correspondence was evidently the result of a preconcerted scheme, with so little even of ingenuity to conceal the fact, that it will, doubtless, yield as little profit to Dr. Cronin as honour to Dr. Venables. If "traction" be derived from *traho*, to *draw*, the term will probably prove a misnomer.

Mr. Perks.—The circumstances are not favourable, in law, to the wishes of the apprentice, who has evidently not been studying *medicine*, however good a foundation he has laid for it. What relaxation of their rules the authorities might make we cannot say. The questions should be sent to the Hall.

A Subscriber in the Union, &c.—We have, throughout, taken no notice of the matter, because the only evidence that should affect a decision on the question consisted of assertion against assertion, involving worthiness of credit in the witnesses, which parties at a distance are not in the necessary condition to estimate. The accuser appears to have been a gentleman of somewhat hasty judgment, but, truly, the poor in this country have so many more cold-tempered than ardent observers of their alleged wrongs, that an error of the latter is very pardonable.

Where did *Mr. Vale* see the account of Dr, Jameson's case of twins?

A Med. Author.—There is no law to prevent the reprint in America. Recently the second edition of Mr. Liston's "Elements of Surgery" was reproduced in America by Dr. Gross, Professor of Surgery in the Louisville Institute, with the addition of two articles on strabismus and club-foot, to supply what the doctor considered to be omissions in the original work.

At the ensuing annual election in *Philadelphia* a coroner is to be chosen for three years. One of the candidates is a physician, and we reiterate our opinion that the duties of the office demand a knowledge of anatomy and medical jurisprudence. The propriety of selecting a physician for this post has been very generally recognised. The present coroner for Middlesex, Mr. Wakley, was elected some years ago, by a very large majority, on the ground of his peculiar professional qualifications, and the practice prevails, likewise, in *New York*, of selecting a physician for the office. If it be given to a non-medical man, he is obliged to discharge his most responsible duties second-hand, or neglect them, as has been generally the case in Philadelphia. — *Med. Exam.*, Philadelphia, No. 40.

A call has this week been made on the Editor by Mr. Joseph Dunn Nelson, to say that the letter signed "Joseph Nelson," printed in The Lancet of Dec. the 24th, page 485, was not written by him, Mr. J. D. Nelson. Our visitor intimated his annoyance at the statements in the letter, but did not disavow the allegations that he was in the habit of giving "medical advice," at a druggist's shop on Ludgate-hill, at sixpence per patient, and advertising his respectable proceedings in little hand-bills shaped like those of the venereal quacks. We regret the imposition—that of the *letter-writer*—but possessed no means of detecting the fraud when the postman brought the communication, and, really, the letter seemed very like the production which it professed to be.

Humanitas. — A coroner cannot legally obtain from the county funds repayment of a fee disbursed to a druggist calling himself a "surgeon," but not a legally-qualified medical practitioner. We do not publish the statement of *H.* because it is anonymous, but any rate-payer might make a representation of the case to the justices in sessions, in order to correct the evil, which in some indiscriminate quarters may be common.

Could not *Dr. R. Smyth* divide his paragraphs into shorter sentences? Some of them are long enough to measure Mr. Freeman, the giant, for his pantaloons, with enough to spare for the waistband besides. We particularly recommend short sentences to authors who wish to be read.

Birmingham School. — (*From a correspondent.*)—That truly noble and munificent benefactor of mankind, the Rev. Dr. Warneford, has placed in the hands of William Sands Cox, Esq., the founder of the Royal School of Medicine and Surgery, at Birmingham, the sum of one thousand pounds, in furtherance of the intended Collegiate Institution for the board, lodging, and care, of medical and surgical students. A sum of fifty pounds has also been presented by the Rev. Vaughan Thomas, of Oxford, for the same purpose, and we understand that a letter on this subject, from the pen of this highly-talented and accomplished scholar, will shortly be submitted to the noble patrons and friends of the school.

The letters of *Mr. Atkinson*, *Dr. Dickson*, *Mr. Adam Thompson*, *Mr. G. R. H. Paterson*, of Perth (is that the name?), *A Subscriber*, and *M.D.*, came too late for further notice or insertion this week.